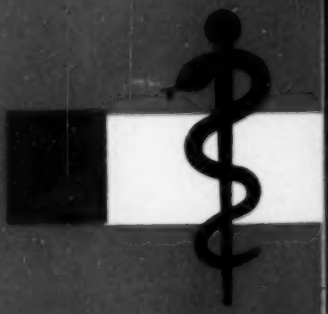
THE JOURNAL OF GENERAL PRACTICE

Medical TIMES



VOL. 78 OCTOBER 1950 NO. 10

a **new**

antibacterial

agent . . .

Wide antibacterial activity, low toxicity and virtual elimination of renal complications distinguish the use of Gantrisin* 'Roche', a new and remarkably soluble sulfonamide. Highly effective in urinary as well as systemic infections, Gantrisin does not require alkali therapy because it is soluble even in mildly acid urine. More than 20 articles in the recent literature attest its high therapeutic value and the low incidence of side-effects. Gantrisin is now available in 0.5 Gm tablets, as a syrup, and in ampuls. Additional information on request.

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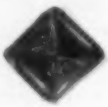
* *Brand of sulfisoxazole (3,4-dimethyl-5-sulfanilamido-isoxazole)*

'Roche'

• 20,000 units penicillin
in a delicious hard candy

High Oral Penicillin Levels Lasting One-half Hour



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PENICILLIN TROCHES

Potent local therapy and prophylaxis of oral infections caused by penicillin-sensitive organisms.

Taste so good that your patients—young and old—will gladly follow the prescribed dosage regimen.

WYETH INCORPORATED
Philadelphia 3, Pa.

*Trade-mark

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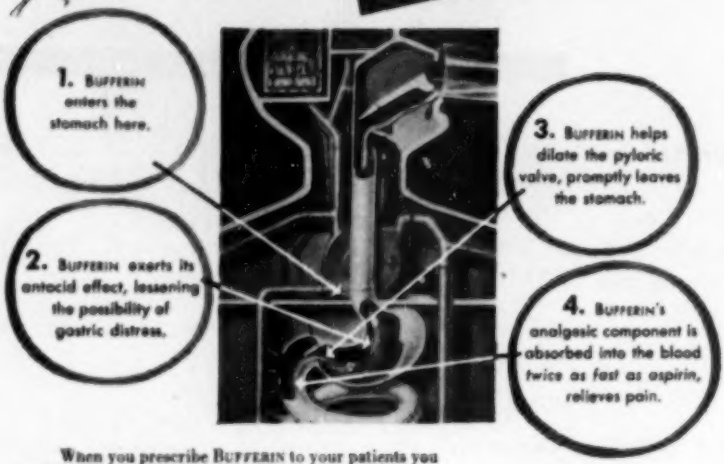
Medical Times is published monthly by Romaine Pierson Publishers, Inc., with publication offices at 90 North Crystal Street, East Stroudsburg, Pa. Executive, advertising and editorial offices at 67 Wall Street, New York 5, N. Y. Acceptance under section 34.64, P.L. and R., authorized February 23, 1950 at East Stroudsburg, Pa.

Give faster pain relief with BUFFERIN

ACTS TWICE AS FAST AS ASPIRIN

WITHOUT GASTRIC DISTRESS!



When you prescribe BUFFERIN to your patients you assure *faster relief of pain*. Clinical studies[1] show that within ten minutes after BUFFERIN is ingested, blood salicylate levels are as great as those attained by aspirin in twice this time. That is why BUFFERIN *acts twice as fast as aspirin*.

BUFFERIN has *greater gastric tolerance*. BUFFERIN'S antacid ingredients provide protection against the gastric distress so often seen with aspirin.[1] BUFFERIN, therefore, is especially suited for use when prolonged use of salicylates is indicated.

1. Effect of Buffering Agents on Absorption of Acetylsalicylic Acid J. Am. Pharm. A., Sc. Ed. 39:21, Jan. 1950.

In vials of 12 and 36 and bottles of 100. Scored for divided dosage. Each BUFFERIN tablet contains 5 grains of acetylsalicylic acid with optimal proportions of magnesium carbonate and aluminum glycinate.

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Economical Convenient Therapy

LINGUETS are specially shaped to fit comfortably into the buccal pocket; highly compressed to insure *slow* effective absorption of the hormone directly into the systemic circulation.

LINGUETS should not be confused with ordinary tablets which have been "proved relatively ineffective" by sublingual administration.

—Escamilla, R. F. and Gordan, G. S.
Bull. Univ. California Med. Center, Nov. 1949

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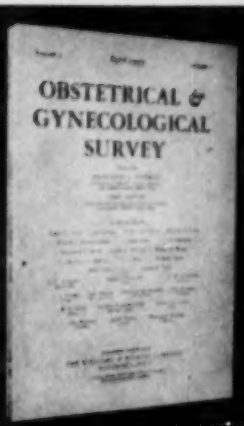
2/157396

MEDICAL BOOK NEWS



"... these statistics are the best that have been reported. In fact, they couldn't be any better."

Editor: Obstetrical & Gynecological Survey
Vol. 4, No. 2: April, 1949: page 190

[illegible] statistics referred to [illegible] are those reported by [illegible] W. Smith in her article, "Diethylstilbestrol in the Prevention and Treatment of Complications of Pregnancy", in the November, 1948, issue of *The American Journal of Obstetrics and Gynecology*. This study of 632 pregnancies showed that, "under stilbestrol treatment the habitual aborter enjoys the same outlook for a living baby as does the average gravida. This is what I mean by saying that these statistics are the best that have been reported".[1]

This report affords additional evidence that the treatment of threatened and habitual abortions with **des** — Grant Process diethylstilbestrol — as pioneered by Karl John Karnaky[2], is the most effective treatment available.

The work of Silbernagel and Burt[3], and of Rosenblum and Melinkoff[4] showed that with diethylstilbestrol *68.4% more* cases were carried to term than with progesterone. In fact, it is now felt that the administration of progesterone may actually hasten abortion[5].

des is the only diethylstilbestrol prepared by the unique Grant Process of triple crystallization. Highly micronized **des** tablets are dissolved within a few seconds and are uniformly absorbed into the blood stream. **des** is specifically designed for the treatment of threatened abortion, habitual abortion and premature labor. The living results obtained with **des** are the best that have been reported. "In fact, they couldn't possibly be any better."

des IS BEST

REFERENCES
1. Editor: Obs. and Gyn. Survey, 96: 821-834, Nov. 1948. 2. Karnaky, K. J. Estrogenic Tolerance in Pregnant Women. Amer. Jr. Obs. and Gyn. 53: 312-316, 1947. 3. Silbernagel, W. M. and Burt, O. P. Ohio State Med. Jr. 39, 4.0 May 1943. 4. Rosenblum and Melinkoff. Preservation of the Threatened Pregnancy with Particular Reference to the Use of Diethylstilbestrol. West. Jr. Surg. Obs. and Gyn. 55: 597-603, Nov. 1947. 5. Hamblen, E. C. Endocrinology of Woman, Springfield, Ill. Charles E. Thomas, 1943, p. 476.

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Medical TIMES

THE JOURNAL OF GENERAL PRACTICE

Incorporating the Long Island Medical Journal and Western Medical Times

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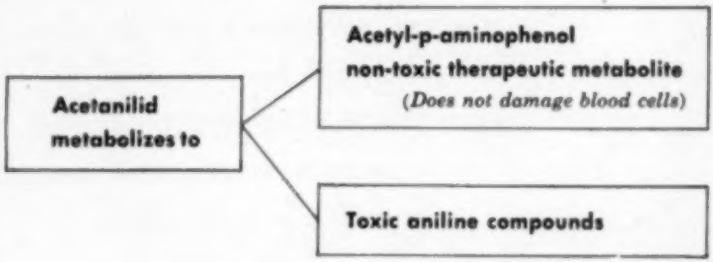
Long known as one of the most potent, rapid-acting analgesics, acetanilid has now been found to have a non-toxic therapeutic factor—*acetyl-p-aminophenol.* Studies at the Yale Laboratory of Applied Physiology and New York University School of Medicine show that *acetyl-p-aminophenol* has the high analgesic potency of acetanilid, without its toxicity. Unlike acetanilid and acetophenetidin compounds, *acetyl-p-aminophenol* does not damage blood cells, is safe even for chronic pain.



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Trigesic offers all the advantages of acetanilid . . . none of the disadvantages . . . plus the benefits of aspirin and caffeine

Each tablet contains 0.125 Gm. *acetyl-p-aminophenol;* 0.23 Gm. aspirin and 0.03 Gm. caffeine. *Bottles of 36, 100 and 1,000.* Also available as TRIGESIC WITH CODEINE, containing, in addition, 16 mg. codeine phosphate. *Bottles of 100.*

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. . . in women, is usually a synthesis of both physiological and psychological equilibrium.

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Only with a *potent* antihistamine and *early* treatment will the best result in mitigation of the common cold be obtained.

CORICIDIN*

(antihistaminic, antipyretic, analgesic)

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CORICIDIN Tablets in tubes of 12, bottles of 100 and 1000 tablets.

*T. M.

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CORICIDIN

SCHERING

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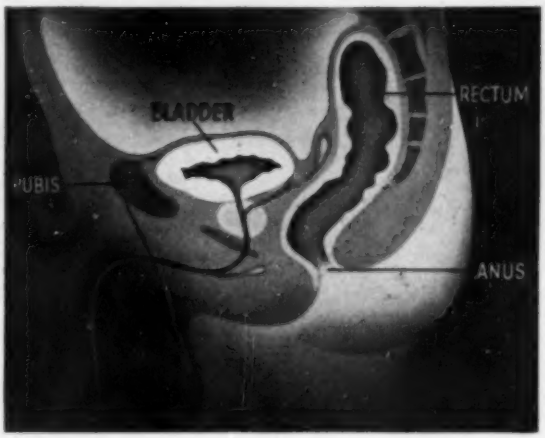
Pain Quickly Relieved, Infection Controlled by a Combination of Sulfathalidine® and Hexylresorcinol

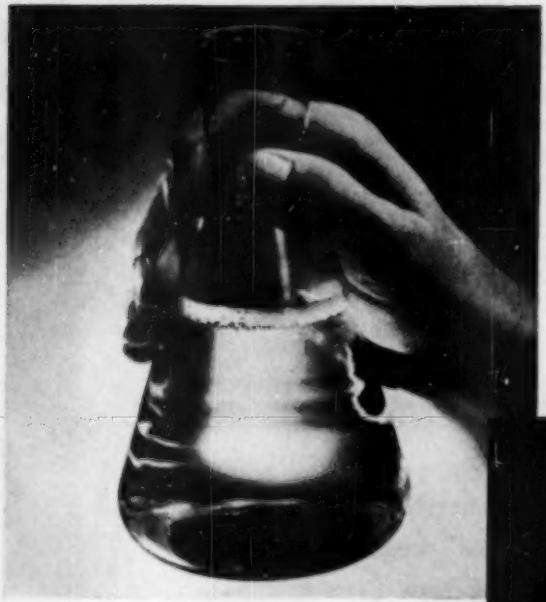
THALEXYL® a new combination of two widely accepted drugs, has proved exceptionally effective for symptomatic and bacterial control of urinary infections. Treatment is based on the anatomic relationship of the rectum and urinary bladder, and on the bacteriostatic, antiseptic and analgesic actions of the two components.

Proximity of Bladder to Rectum is considered important factor in success of *Thalexyl* capsules against urinary infections. *Sulfathalidine* component eliminates source of infection from bowel, and its bacteriostatic action may block escape of organisms into urinary tract. Hexylresorcinol relieves pain rapidly, exerts pronounced antiseptic action against wide range of organisms.



Prompt Relief. When *Thalexyl* capsules are administered in acute and chronic urinary tract infections, pain and discomfort are quickly relieved, and the urine usually becomes clear and sparkling within one week. The recommended dosage for adults is 4 *Thalexyl* capsules three times daily (a total of 6.0 Gm. of *Sulfathalidine* and 1.2 Gm. of hexylresorcinol). In children 6 to 12 years of age, 3 *Thalexyl* capsules may be given thrice daily (4.5 Gm. of *Sulfathalidine* and 0.9 Gm. of hexylresorcinol). Medication should be continued for three weeks, regardless of symptomatic and bacteriologic improvement, to reduce to a minimum the possibility of recurrence.

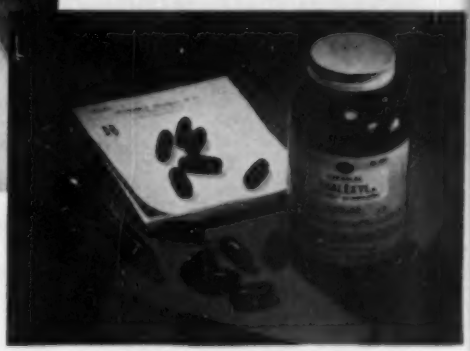
URINARY TRACT INFECTIONS



Thalexyl Formula: The Medical Research Division of Sharp & Dohme has developed in *Thalexyl* capsules a new combination of highly effective drugs for treatment of certain types of urinary tract infections:

Sulfathalidine® phthalylsulfathiazole	0.5 Gm.
Hexylresorcinol	0.1 Gm.

Supplied in bottles of 100 capsules, *Thalexyl* capsules are easily swallowed because of their distinctive elongated shape.



Clear, Sparkling Urine is usually obtained within one week after the beginning of *Thalexyl* therapy. Results are due to double antibacterial action of *Sulfathalidine* in the lower bowel and hexylresorcinol in the urinary tract, where the latter also exerts a pronounced analgesic effect, bringing relief from vesical irritability, burning, frequency, and tenesmus.

———Write for Samples and Literature———

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West Point, Pa.

Gentlemen:

Kindly send me, without obligation, literature describing *Thalexyl* capsules and samples for clinical trial.

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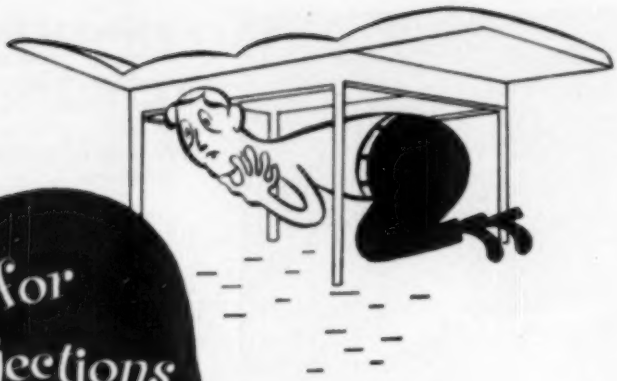
Street_____

City_____ Zone_____ State_____



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are easy to give, and — just
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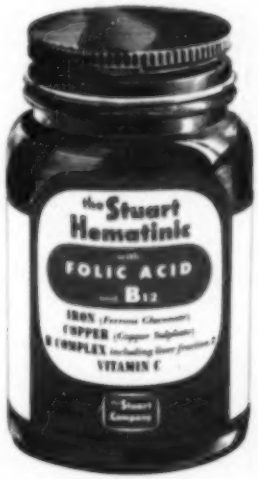

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VITAMIN C	50 Mgs.	100 Mgs.	150 Mgs.	200 Mgs.
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IRON	10 Mgs.	20 Mgs.	30 Mgs.	40 Mgs.
COPPER	0.5 Mg.	1 Mg.	1.5 Mgs.	2 Mgs.
IODINE	0.075 Mg.	0.15 Mg.	0.225 Mg.	0.3 Mg.
BORON	0.05 Mg.	0.1 Mg.	0.15 Mg.	0.2 Mg.
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**aqueous solution of oxalic and malonic acids for parenteral use.*

Supplied in 10 cc. diaphragm-stoppered vials.
Comprehensive dosage chart and literature on request.

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peptomatic* digestional aid in single tablet form

By developing an entirely new type of enzymatic carrier, literally "a tablet within a tablet," Robins now makes available a triple-enzyme digestant—Entozyme. In *one small specially constructed tablet*, Entozyme "packs" pepsin, pancreatin and bile salts—in such a way that they are released only at the gastro-intestinal level of optimal activity. Thus Entozyme greatly simplifies and makes more effective the treatment of complex digestive disturbances of the gastro-intestinal tract. Clinical studies[1,2,3] have demonstrated the value of Entozyme in such conditions as chronic cholecystitis, chronic duodenal ulcer, acute and chronic pancreatitis and certain postoperative syndromes of the gastro-intestinal tract—in relieving nausea, belching, distention, anorexia, food intolerance, etc.

FORMULA: Each specially constructed tablet contains Pancreatin, U.S.P., 300 mg.; Pepsin, N.F., 250 mg.; Bile Salts, 150 mg.

DOSAGE: One or two tablets after each meal, or as directed by physician, without crushing or chewing.

AVAILABLE: Bottles of 25 and 100.

REFERENCES:

1. Kammandel, N. et al.: Awaiting publication.
2. McGavack, T. H. and Klotz, S. D.: Bull. Flower Fifth Ave. Hosp., 9:61, 1946.
3. Weissberg, J., McGavack, T. H. and Boyd, Linn J.: Am. J. Digest. Dis., 15:332, 1948.

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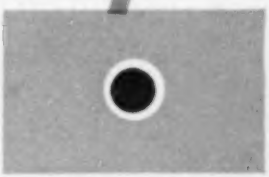

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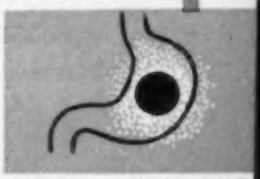
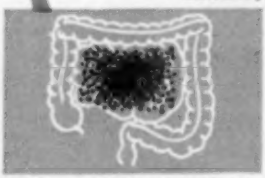
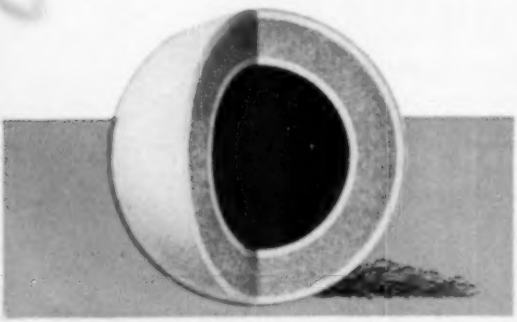


Releases pepsin in the stomach



Releases pancreatin and bile salts in the small intestine



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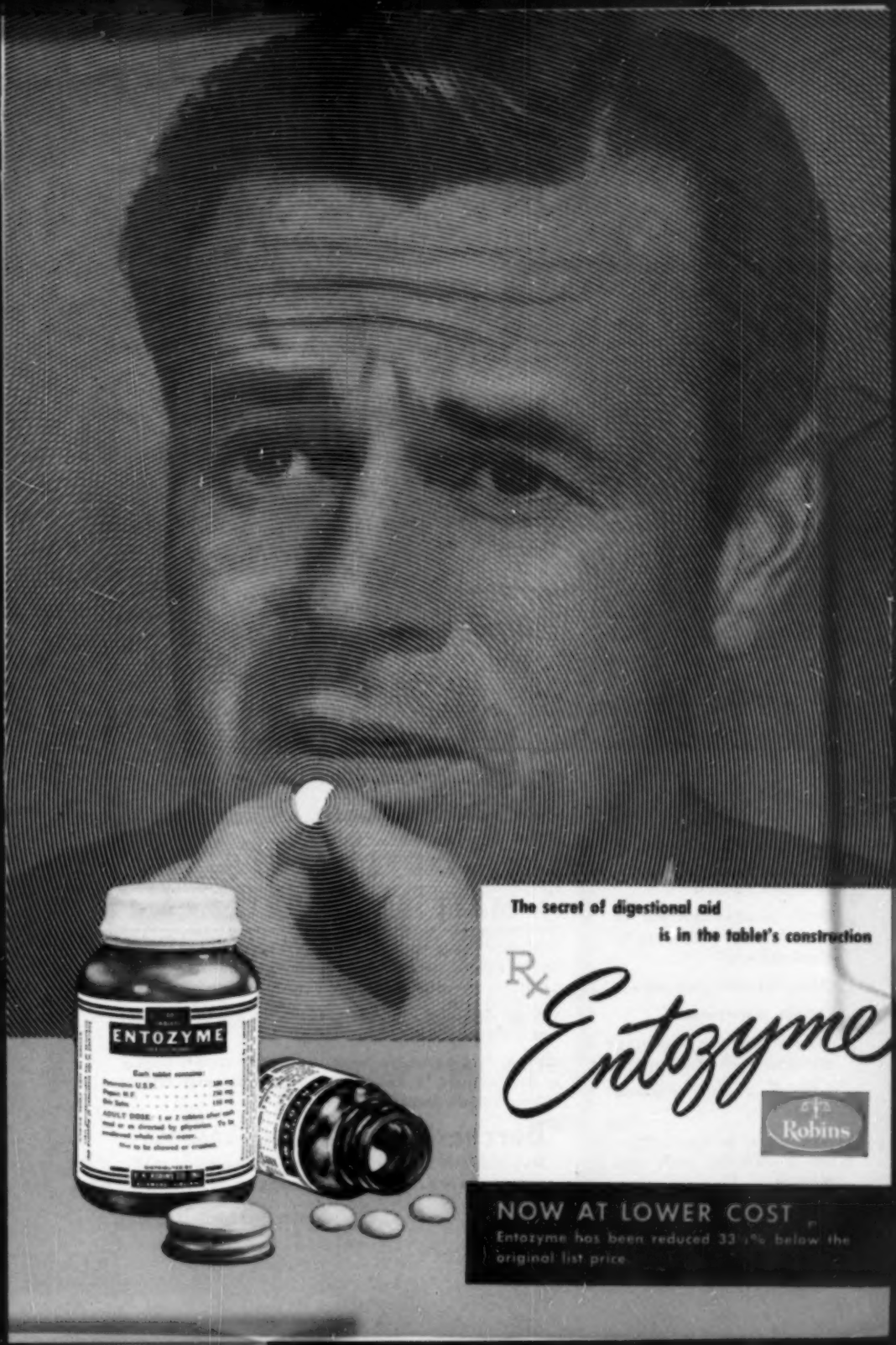
a coined word to describe the unique mechanical action of Entozyme Tablet.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The secret of digestional aid
is in the tablet's construction
℞ Entozyme
Robins
NOW AT LOWER COST
Entozyme has been reduced 33 1/3% below the original list price

LETTERS TO THE EDITOR

This department is offered as an Open Forum for the discussion of topical medical issues. All letters must be signed. However, to protect the identity of writers, who are invited to comment on controversial subjects, names will be omitted when requested.

"BURNS"

"The special article on 'Burns' in the June Medical Times is an interesting summary of the literature and practice, although a more critical appraisal might be useful. The major question to be decided seems to be whether or not to cover burns, and if to cover, how? There appears to be considerable doubt as to the existence of toxemia which 'may be completely absent in uninfected cases', and much emphasis on shock whose chief cause is said to be depletion of red cell and plasma volume by loss into and through the burned tissues. If then there is no toxin to be drained away, and if plasma loss is an important retardant of prompt healing, there would appear abundant reason to consider further covering burned areas with impermeable dressings.

"As pointed out in the article, sterile fine-meshed gauze covered by cotton waste and a sterile bandage is advocated, and Dr. Owens of New Orleans (1944) described successful use of regenerated cellulose acetate parachute cloth for the first layer. During the war Olsen (1945) described the use of tantalum oxide which forms a dense scab on thermal or chemical burns, and which gave smooth painless healing under a pressure dressing. Olsen had previously used tantalum foil satisfactorily in such cases, but found the tantalum oxide powder more readily conformable to tissues. There are several

—Continued on page 46a

Specific for

vaginal trichomoniasis

"All patients became symptom-free and bacteriologically negative..."[1]

Now effective in

moniliasis

"Symptomatic cure was effected in about 80% and mycologic cure in about 50%..."[2]

DUAL INFESTATION

AVC IMPROVED

ALLANTOMIDE VAGINAL CREAM with 9-Aminoacridine

MONILIA

TRICHOMONAS

AVC (Allantomide Vaginal Cream) has long been accepted by clinicians as specific for the treatment of vaginal trichomoniasis. Investigators have unanimously reported it effective in 98-100% of cases.[3] With the addition of 9-aminoacridine, a new, potent antiseptic agent, AVC IMPROVED is capable of effecting mycologic cure in moniliasis.[2] Thus, AVC IMPROVED may be expected to provide relief in those stubborn cases of vaginitis which are due to mixed infections.

Available in 4 oz. tubes, with or without plastic applicator.

1. Horoschak, A., and Horoschak, S.: Jl. Med. Soc. N. J., 43:92, Mar., 1946.
2. Dill, L. V. & Martin, S. S.: Med. Ann. Dist. Col., 17:239, July, 1948.
3. Cacciarelli, R. A.: Jl. Med. Soc. N. J., 46:87, Feb., 1949.

The National Drug Company Philadelphia 44, Pa.

More than Half a Century of Service to the Medical Profession

metabolic therapy in

infertility **menstrual disorders**
obesity **habitual abortion**
pregnancy

therapeutic need

As thyroid accelerates cellular metabolism proportionate increases occur in tissue demands for co-enzymes of carbohydrate metabolism,[1] for vitamin precursors of respiratory enzymes — thiamine and riboflavin — and for labile methyl groups of which choline is the most effective provider.[2]

therapeutic use

Conversely recent studies have demonstrated that thyroid function is facilitated by vitamin B complex and choline.[3,4] Thyroid has been described as an effective lipotropic agent.[5] But choline must be present for thyroxine to exert its "lipotropic" action.[4]

therapeutic effectiveness

For optimal efficiency METHYROID provides balanced dosage of those substances known to be intimately involved in the general metabolism and frequently depressed in infertility, menstrual disorders, obesity, habitual abortion, and pregnancy.

Methyroid

(An *Indicationalized* Formula)

Thyroid substance USP	0.5 gr.
Thiamine	3.0 mg.
Riboflavin	1.0 mg.
Choline dihydrogen citrate	300 mg.

Dosage: 1 to 3 tablets daily • **Supplied:** bottles of 100 tablets

bibliography

(1) Cowgill, G. R., The Physiology of Vitamin B. The Vitamins, A Symposium, American Medical Association, 1939, pp. 159-179. (2) Pool, W. D.; Dunn, K., and Kemp, C. R.: J. Iowa State Med. Soc. (April) 1947. (3) Williams, R. D., and Kendall, E. C.: J. A. M. A. *127*:1412, 1945. (4) Gubner, R., and Ungerleider, H. E.: Am. J. Med. *6*:00 (Jan.) 1949. (5) Stamler, J., Bolene, C., Levinson, E., and Dudley, M.: Endocrinology *46*:382 (April) 1950.

Methyroid

in infertility

"... the empirical use of thyroid has yielded the most satisfactory results in the treatment of sterility in both sexes."[1] Adjunctive lipotropic therapy is less well known but equally important since hormonal imbalance due to failure of hepatic estrogen inactivation[2,3] and testicular steatosis may be corrected by B vitamin and choline therapy.[4]

in obesity

Thyroid functions as a lipotropic, facilitating the action of choline and fostering use rather than deposition of fat.[5] When using thyroid, choline and B complex should be administered to supply the increased needs of accelerated cellular metabolism and to provide lipotropic factors necessary for optimal fat mobilization.

in habitual abortion and pregnancy

Low thyroid function is common in patients with habitual abortion[6] and the importance of thyroid therapy in this disorder has long been accepted. Here, too, choline helps maintain healthy cholesterol levels and combats deposition of liver fat and hormonal imbalance. Administration of thiamine and riboflavin is necessary to full utilization of administered thyroid particularly when pregnancy creates an emphasized need.

in menstrual disorders

Thyroid is most effective in the treatment of dysmenorrhea[7] and other menstrual disorders.[8] Again hormonal imbalance and menstrual dysfunction of hepatic origin should be managed by supplementary lipotropic therapy to restore the normal thyroid-liver axis in its control of androgen-estrogen balance.

only METHYROID

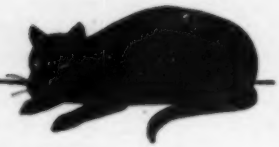
Only METHYROID contains in one tablet the vital lipotropic elements· Choline, Thyroid, Thiamine and Riboflavin.

bibliography

(1) Siegler, S. L.: Fertility in Women, Philadelphia, J. B. Lippincott, 1944, p. 313. (2) Primer, L., and Waldman, S.: J. A. M. A. *140*:369, May 21, 1949. (3) Horta, R.: Effect of B Vitamins on the Endocrine Aspects of Reproduction, Vitamins and Hormones, New York, Academic Press, Inc., 1946, Vol. IV, pp. 138-9. (4) Gandman, J.: Fertility & Sterility *1*:259 (May) 1950. (5) Best, C. H., and Taylor, N.: Physiological Basis of Medical Practice, ed. 4, Baltimore, Williams & Wilkins, 1945, p. 596. (6) Delfs, E., and Jones, G. E. S.: South. M. J. *41*:809 (Sept.) 1948. (7) Shute, E. V.: Canad. M. A. J. *42*:105, 1940. (8) Bacsra, O.: Arizona Med. *6*:33, No. 1, 1949.

Lakeside Laboratories, INC., MILWAUKEE 1, WISCONSIN

...released



Safely

Whether or not the diverse etiology of tension may embrace emotional symptoms or smooth muscle spasm, HOMADONNA—the modern sedative-antispasmodic—has been formulated to meet the patient's urgent need for *prompt*, *safe* relief.

Prompt . . . because the spasmolytic agent of HOMADONNA has an action on gastric secretion and pyloric spasm comparable to atropine.

Safe . . . because this antispasmodic, homatropine methylbromide is less than one thirtieth as toxic as atropine. Furthermore, in addition to allaying nervous tension, the sedative action of HOMADONNA serves to enhance its antispasmodic action.

Your next case of pylorospasm, peptic ulcer, subacute gastritis, cardiospasm or spastic colitis will present a splendid opportunity to judge HOMADONNA in action. It is also suggested in the control and treatment of dysmenorrhea.

SUPPLIED:

HOMADONNA ELIXIR
in pint bottles.

HOMADONNA TABLETS
in bottles of 100, 500 and 1000.

Each creased tablet or fluidram (4 cc.) of palatable elixir contains:

Phenobarbital	**¼ gr. (16 mg.)**
Homatropine Methylbromide . . .	**1/26 gr. (2.5 mg.)**

HOMADONNA

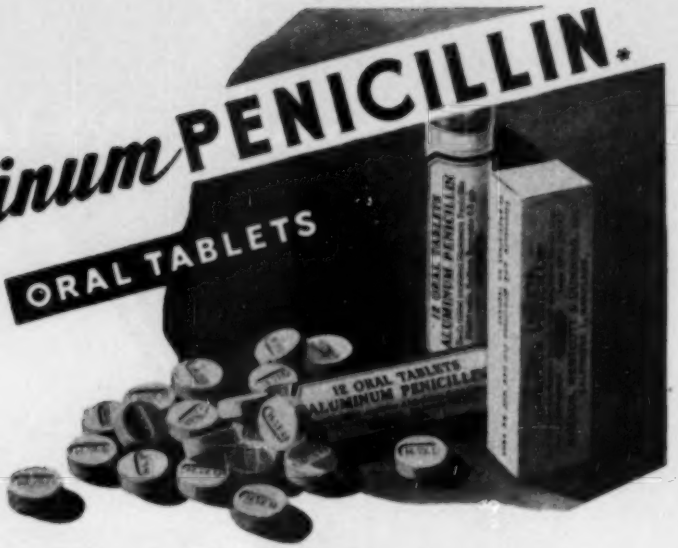
VB

VANPELT & BROWN, INC. *Pharmaceutical Chemists* **RICHMOND, VIRGINIA**

RED CROSS ADHESIVE TAPE

* No connection whatever with the American National Red Cross

Aluminum PENICILLIN.*



Greater effectiveness

Oral therapy with Aluminum Penicillin has proved to be effective in fulminating infections such as pneumonia[1] and in other infections due to streptococci, staphylococci and gonococci.[2] It rarely causes gastric disturbance or allergic reactions. The patient's bodily and mental comfort is improved because the necessity for frequent injections is eliminated.

The unique advantages of Aluminum Penicillin are that it is not soluble in solutions of acidity corresponding to that of gastric secretion, but is gradually converted into a readily absorbed form in the intestinal tract. These factors provide for maximum utilization of the dosage administered, higher and more prolonged blood levels.[3]

Sodium benzoate is added because it inhibits the destructive action of intestinal enzymes.[4]

Oral Tablets

Each tablet contains: Aluminum Penicillin, 50,000 units; sodium benzoate, 0.3 gram. Supplied in vials of 12 tablets.

[1]Terry, L. L. and Friedman, M. The Military Surgeon, Vol. 103, No. 5, November, 1948.
[2]Friedman, M. and Terry, L. L. Southern Medical Journal, Vol. 42, No. 6, June, 1949.
[3]Bohls, S. W. and Cook, E. B. M. Texas State Journal of Medicine, Vol. 41, November, 1945, p. 342.
[4]Reid, R. D., Felton, L. C. and Pitroff, M. A. Pro. Soc. for Exp. Biol. and Med., Vol. 63, 1946, p. 438.

* Patent applied for.

HYNSON, WESTCOTT & DUNNING, INC.
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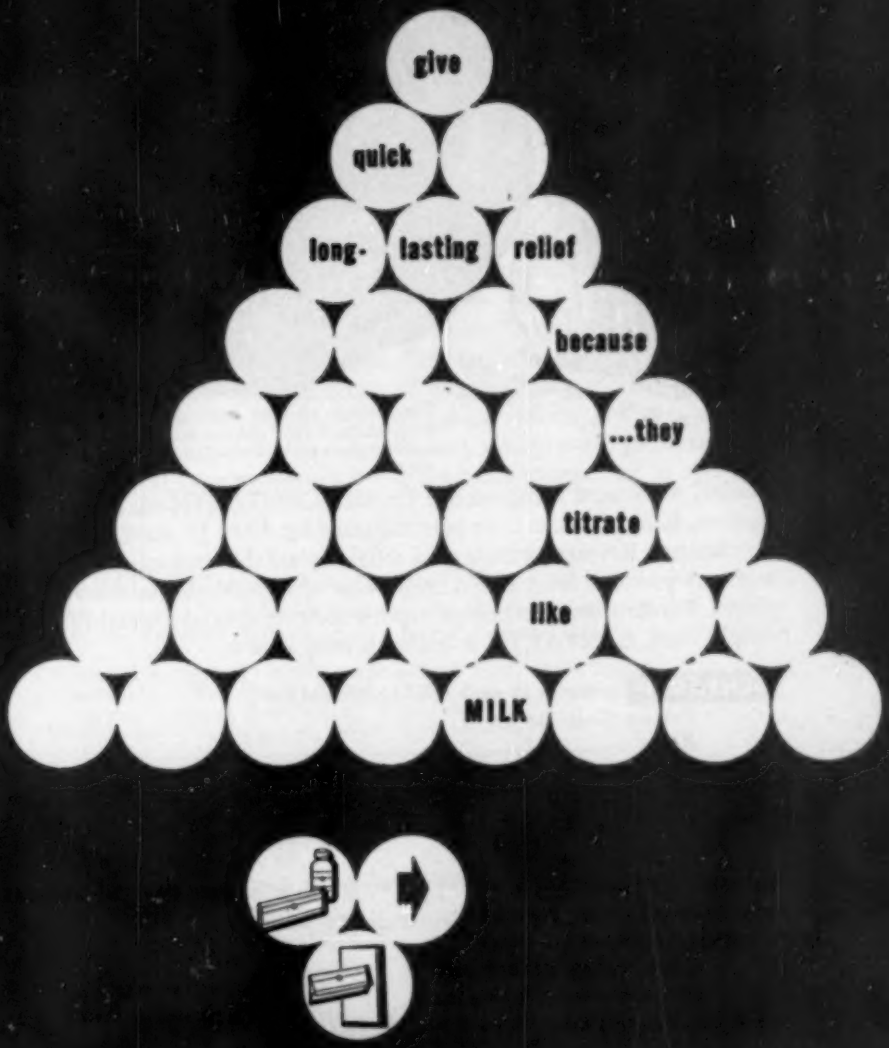
give
quick
long-
lasting
relief
because
...they
titrate
like
MILK

RHEUMATIC CASES OF

FOUND OUTSTANDING RELIEF

Cross-section of knee joint. Red area denotes synovial membrane wherein attributed action of sodium gentisate against hyaluronidase occurs.

Clinical work now being carried on with GENTARTH on arthritic patients, some of whom have been suffering for 30 to 35 years, reveals that this new Raymer formula gave relief beyond that ever experienced with any previous drug. *Not a single case of intolerance has been reported.* Furthermore, toxicologic reports indicate that on a weight-for-weight basis, GENTARTH is less toxic than aspirin.

GENTARTH *contains in each salol-coated tablet:*

Sodium Gentisate	*100 mg.*
Raysal	*325 mg.*
(representing 43% Salicylic Acid and 3% Iodine in a Calcium-Sodium Phosphate Buffer Salt Combination)	
Succinic Acid	*130 mg.*

Recommended dosage:
2 or more tablets, 3 or 4 times daily (after meals and before bedtime)

Available at all pharmacies on prescription

Nearly a Third of a Century Serving the Physician

PHARMACAL COMPANY

Pharmaceutical Manufacturers

30-35 YEARS' STANDING

WITH GENTARTH

The New Gentisate-Containing Anti-rheumatic

GENTARTH INHIBITS SPREAD OF HYALURONIDASE

While the basis of GENTARTH is buffered salicylate, still the accepted stand-by in the arthritides, to it has been added sodium gentisate which Meyer and Ragan[1] have shown to bring favorable results in rheumatoid arthritis and acute rheumatic fever. Pain, swelling and joint inflammation disappeared. The action of sodium gentisate has been attributed to its inhibition of the spreading effect of hyaluronidase.[2, 3] *Raymer has pioneered in making sodium gentisate available to the medical profession.* Succinic acid, also present, protects against decrease in prothrombin time, a necessary precaution in continued salicylate therapy.

GENTARTH *Tablets are supplied in bottles of 100, 500, 1,000.*
Also Available Sodium Gentisate Tablets 325 mg.—bottles of 100. Sodium Gentisate (powder) for prescription formulation through leading pharmacies.

[1] Meyer, K. & Ragan, C.: Mod. Concepts of Card. Disp., 17:2 (1948)
[2] Quick, A. J.: J. Biol. Chem. 101:475 (1933)
[3] Guerra, J.: J. Pharm. Exp. Ther., 87:1943 (1946)

TRY A CASE ON GENTARTH

Fill in the coupon. Let Raymer send you enough GENTARTH Tablets for one case for a week. Marked results in pain-relief should be demonstrated in that time. Reduction of swelling and/or inflammation usually follows.

N. E. Cor. Jasper & Willard Sts.
Philadelphia 34, Pa.

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Gentlemen:

Please send me free sufficient GENTARTH Tablets for a clinical trial for 1 week.

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THE EFFECTIVE HEMATINIC FOR THE ANEMIAS OF . . .

nutritional inadequacies
pre- and post-natal demands
dietary restrictions
gynecological disorders
acute or chronic blood losses
pre- and post-surgical conditions
acute or chronic infections
debilitating diseases
"run-down" or lowered resistance states

AN EFFECTIVE HEMATINIC FOR ALL HYPOCHROMIC ANEMIAS..... HEMOSULES* 'Warner'

The recommended daily dose of 6 HEMOSULES* provides...

13 grains of dried Ferrous Sulfate, U.S.P., equivalent to 285 mg. of assimilable iron or 28 x M.D.R.†		
Thiamin hydrochloride (Vitamin B_1)		6.0 mg. (6 x M.D.R.†)
Riboflavin (Vitamin B_2)		6.0 mg. (3 x M.D.R.†)
Ascorbic acid (Vitamin C)		90.0 mg. (3 x M.D.R.†)
Niacinamide**		24.0 mg.
Pyridoxine hydrochloride (Vitamin B_6)***		3.0 mg.
d-Panthenol (equiv. to 3.0 mg. Pantothenic acid)***		2.82 mg.
Folic acid***		1.2 mg.
Liver Fraction 2	(15 grs.)	972.0 mg.

†Minimum daily adult requirement.

**The minimum daily requirement for niacinamide has not been established.

***The need for pyridoxine hydrochloride, pantothenic acid and folic acid in human nutrition has not been established.

*Trade Mark

WILLIAM R. WARNER
Division of Warner-Hudnut, Inc.
New York • Los Angeles • St. Louis

n a ***critical evaluation***

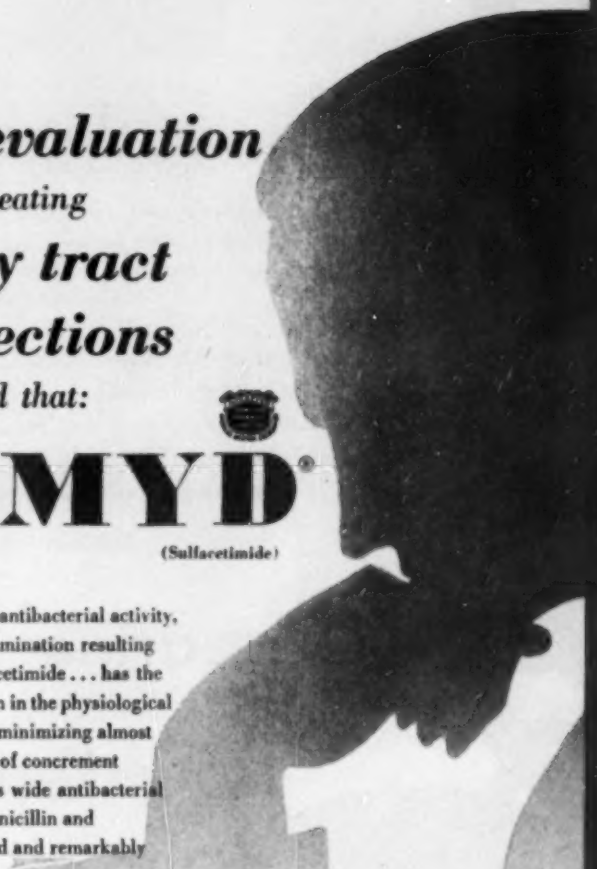
of drugs for treating

urinary tract infections

it has been noted that:

SULAMYD®

(Sulfacetimide)



"combines the features of good antibacterial activity, low toxicity, and rapid renal elimination resulting in high urinary level. . . . Sulfacetimide . . . has the advantage of high solubility even in the physiological acid range of the urine, thereby minimizing almost to a negligible point the danger of concrement formation. . . ."[1] Because of its wide antibacterial range it may be preferable to penicillin and streptomycin.[2] It is well tolerated and remarkably free from side effects.[3]

DOSAGE: Therapeutic: 2 tablets t.i.d. for 10 days. Prophylactic: 1 tablet t.i.d.

SULAMYD Tablets 0.5 Gm. in bottles of 100 and 1000 tablets.

1. Nesbit, R. M., and Glickman, S. L.: J. Michigan State M. Soc. 46:664, 1947.
2. Dodson, A. I.: West Virginia M.J. 46:6, 1949.
3. Seneca, H.; Henderson, E., and Harvey, M.: J. Urol. 61:1105, 1949.

Schering CORPORATION·BLOOMFIELD, NEW JERSEY

SULAMYD

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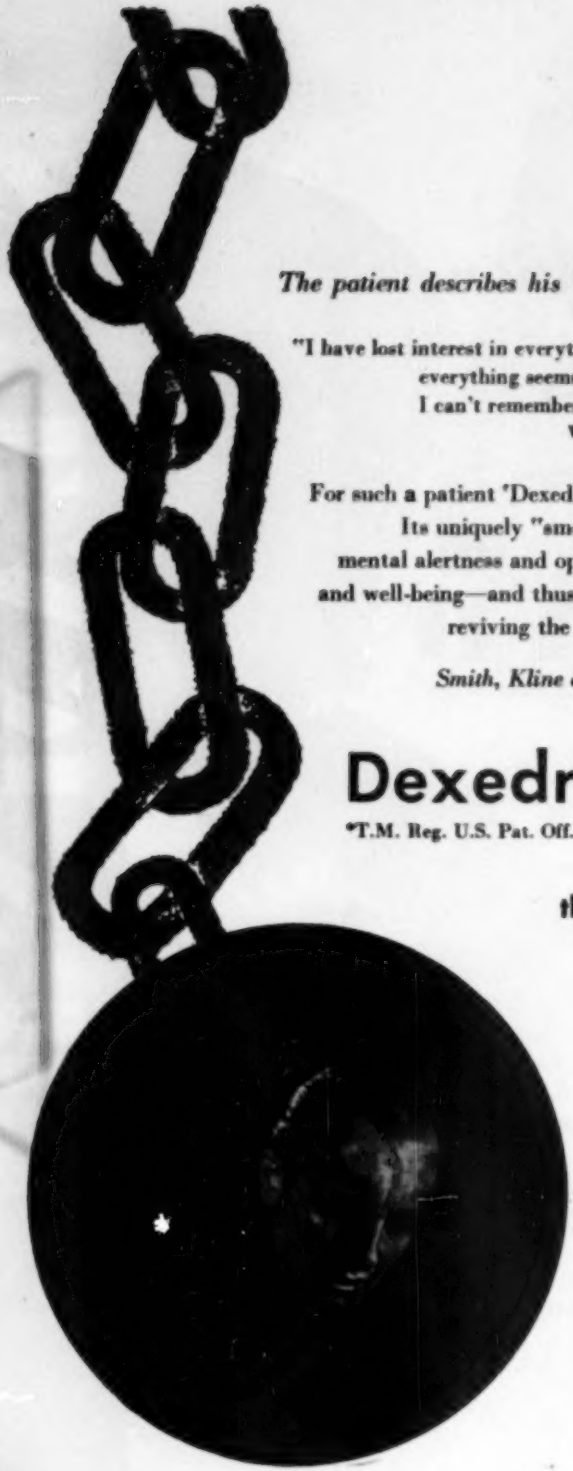

The patient describes his **depression:**

"I have lost interest in everything—I have no ambition any more—
everything seems futile—I feel frustrated and lonely—
I can't remember or concentrate—I am *all slowed up.*"
Washburne, A.C.: Ann. Int. Med. 32:265, 1950.

For such a patient 'Dexedrine' Sulfate is of unequalled value. Its uniquely "smooth" antidepressant effect restores mental alertness and optimism, induces a feeling of energy and well-being—and thus has the happy effect of once again reviving the patient's interest in life and living.

Smith, Kline & French Laboratories, Philadelphia

Dexedrine* Sulfate

*T.M. Reg. U.S. Pat. Off.

the antidepressant of choice

tablets

elixir

natural choice

DESICOL

desiccated whole bile

for bile therapy

DESICOL medication is utilized in treatment of intestinal indigestion and putrefaction, of constipation, and of other conditions in which bile deficiency may be a factor.

DESICOL Kapseals® are a natural choice in management of disorders of the liver, gallbladder and biliary passages.

DESICOL, Kapseals, containing fresh whole bile with only the water removed, supply all the original bile factors. Action closely resembles that of natural whole bile in clinical effect.

Therefore, DESICOL Kapseals have a four-fold action:

1. increase formation of liver bile (cholepoietic effect)
2. increase bile volume (choleretic effect)
3. stimulate emptying of the gallbladder (cholagogic effect)
4. compensate for deficiencies of bile in the digestive process.

Kapseals DESICOL are supplied in bottles of 100 and 1000.

PARKE, DAVIS & COMPANY

MEDICAMENTA VERA

MODERN MEDICINALS

Physicians will find that these brief resumes of essential information relative to the newer products are so prepared that they may be removed and pasted on standard 3 x 5" file cards, and filed for ready reference.

Veriloid

10-50

MANUFACTURER: Riker Laboratories, Inc., 8480 Beverly Boulevard, Los Angeles 54, Calif.

INDICATIONS: In the treatment of high blood pressure, not only simple hypertension but also severe essential and malignant hypertension.

ACTIVE CONSTITUENTS: The hypotensive ester alkaloids of veratrum viride.

DOSAGE: As indicated.

HOW SUPPLIED: In 1.0 mg. scored tablets in bottles of 100 and 200.

Bumintest

10-50

MANUFACTURER: Ames Company, Inc., Elkhart, Ind.

INDICATIONS: Test for albuminuria.

ACTIVE CONSTITUENT: A stable, reagent tablet containing sulfosalicylic acid.

HOW SUPPLIED: In bottles of 32, 100, and 500.

Oxsorbil Capsules

10-50

MANUFACTURER: Ives-Cameron Company, Inc., 22 East 40th St., New York 16, N. Y.

INDICATIONS: In chronic cholecystitis, noncalculous cholangitis, postcholecystectomy syndrome, biliary dyskinesia, biliary stasis without total obstruction to aid drainage of bile ducts and enhance fat emulsification.

ACTIVE CONSTITUENTS: Each capsule contains: Dehydrocholic acid, ½ grain; desoxycholic acid, ½ grain; extract of ox bile, U.S.P., 1 grain; sorbitan monooleate polyoxyethylene derivative, 2½ grains; and oleic acid, U.S.P., 2¾ grains.

DOSAGE: Suggested dosage is one to two capsules three times a day.

HOW SUPPLIED: In bottles of 100 gelatine capsules.

Tri-Sulfameth

10-50

MANUFACTURER: Casimir Funk, Inc., New York, New York.

INDICATIONS: In all infections due to sulfonamide susceptible organisms.

ACTIVE CONSTITUENTS: Each 5 cc. (approximately 1 teaspoonful) of syrup or each tablet supplies: Sulfadiazine, 0.165 Gm.; sulfamerazine, 0.165 Gm.; sulfamethazine, 0.165 Gm.; and sodium citrate, 0.5 Gm. (in the tablets).

DOSAGE: Orally, for infants and children, initial dose: 0.1 Gm. per kilogram of body weight up to 40 kilograms of body weight, followed by one quarter the initial dose every 6 hours. For adults, initial dose: 3 to 4 Gm. followed by 1 Gm. every 6 to 8 hours thereafter, and until the temperature has remained normal for 48 to 72 hours. In very severe infections, above dosage may be increased by 50 per cent.

HOW SUPPLIED: Tri-Sulfameth: Syrup, bottles of 4 oz., 16 oz., and 1 gal.; tablets, bottles of 50, 100, 500, and 1000.

—Continued on page 38a

NOW PROOF...in an instant, Doctor, PHILIP MORRIS are LESS IRRITATING

Just Make This Simple Test:

1 . . . light up a **PHILIP MORRIS**

Take a puff—DON'T INHALE. Just s-l-o-w-l-y let the smoke come through your nose. Easy, isn't it? AND NOW...

2 . . . light up your present brand

DON'T INHALE. Just take a puff and s-l-o-w-l-y let the smoke come through your nose. Notice that bite, that sting? Quite a difference from PHILIP MORRIS!

YES, your own *personal experience* confirms the results of the clinical and laboratory tests.* With proof so conclusive, would it not be good practice to suggest PHILIP MORRIS to your patients who smoke?

PHILIP MORRIS

Philip Morris & Co., Ltd., Inc.
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Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245; *N. Y. State Journ. Med.*, *Vol.* 35, 6-1-35, *No.* 11, 590-592; *Laryngoscope*, *Feb.* 1935, *Vol. XLV*, *No.* 2, 149-154; *Laryngoscope*, *Jan.* 1937, *Vol. XLVII*, *No.* 1, 58-60

—Continued from page 36a

Prulose Complex

10-50

MANUFACTURER: The Harrower Laboratory, Inc., Jersey City 6, New Jersey.

INDICATIONS: For therapeutic correction of functional constipation.

ACTIVE CONSTITUENTS: Dehydrated prune concentrate (2 gr.) fortified with an isatin derivative (diacetylhydroxyphenylisatin 1/65 gr.) combined with methylcellulose (6 gr.) to produce activated moist bulk.

DOSAGE: 3 or more tablets, with water, twice daily, preferable after breakfast and before retiring, until normal elimination is established.

HOW SUPPLIED: In bottles of 100 tablets.

Stilbetin

10-50

MANUFACTURER: E. R. Squibb and Sons, 745 Fifth Avenue, New York 22, N. Y.

INDICATIONS: To control threatened accidents of pregnancy.

ACTIVE CONSTITUENT: Diethylstilbestrol.

DOSAGE: As indicated.

HOW SUPPLIED: In bottles of 100 and 1,000 in strengths of 0.1 mg., 0.25 mg., 0.5 mg., 1.0 mg., 5.0 mg., and 25.0 mg.

Litrison Capsules

10-50

MANUFACTURER: Hoffmann-La Roche, Inc., Roche Park, Nutley 10, N. J.

INDICATIONS: A liver-protecting dietary supplement recommended for the prevention and treatment of those liver diseases which are responsive to lipotropic factors and fat and water-soluble vitamins.

ACTIVE CONSTITUENTS: Each capsule contains: *dl*-Methionine, 150 mg.; choline dihydrogen citrate, 180 mg.; thiamine hydrochloride, 3 mg.; riboflavin, 3 mg.; panthenol, (equiv. to 4.5 mg. Ca pantothenate), 4.5 mg.; pyridoxine hydrochloride, 3 mg.; niacinamide, 9 mg.; folic acid, 0.6 mg.; biotin, 0.15 mg.; vitamin B_{12} (concentrate corresponding to 0.001 mg. of pure vitamin B_{12}), 0.001 mg.; vitamin A palmitate (synthetic), 4,500 U.S.P. units; ephynal acetate (*dl*-alpha-tocopherol acetate), 4.5 mg.

DOSAGE: A daily dose of six capsules is recommended.

HOW SUPPLIED: In bottles of 100 and 500.

Micropellets—Oreton-F

10-50

MANUFACTURER: Schering Corporation, Bloomfield, N. J.

INDICATIONS: In male sex hormone deficiency.

ACTIVE CONSTITUENTS: Testosterone.

DOSAGE: As indicated. Administered by *intramuscular* injection.

HOW SUPPLIED: In vials of 10 cc., 25 and 50 mg. per cc.; boxes of 1 and 6 vials.

Cehistra

10-50

MANUFACTURER: Organon, Inc., Orange, N. J.

INDICATIONS: Especially valuable for the symptomatic control of the common cold, hay fever, vasomotor rhinitis, urticaria, atopic eczema and dermatitis, and some cases of asthma. It is worthy of trial in vernal conjunctivitis, angioneurotic edema, gastrointestinal allergy, allergic drug reactions, erythema multiforme, neurodermatitis, and pruritis of nonspecific origin, as well as in other allergic conditions responding to antihistamine or high-dosage vitamin C therapy.

ACTIVE CONSTITUENTS: Each tablet contains: prophenpyridamine maleate 10 mg., ascorbic acid, 100 mg.; and acetylsalicylic acid, in an alkalizing base consisting of sodium bicarbonate (1920 mg.—approximately a U.S.P. dose), calcium hydroxide, and citric acid.

DOSAGE: Cehistra tablets must be dissolved in water—preferably water at room temperature—before taking. The recommended adult dose is 1 tablet dissolved in a full glass of water every 3 or 4 hours until symptoms subside. In the symptomatic treatment of the common cold, it is suggested that two Cehistra tablets be given initially, followed by one every 3 or 4 hours until the symptoms are brought under control. For children, approximately one-half the adult Cehistra dosage will usually suffice. The dosage may, however, be varied according to the severity of the allergic disturbance and the patient's responsiveness to therapy.

HOW SUPPLIED: In vials of 10 tablets.

life-long constipation

due to bulk deficiency

corrected in days

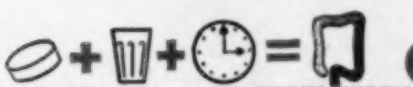
YEARS OF OBSTINATE CONSTIPATION can be corrected in days with Cellothyl. Bargen[1] reports "striking" results in patients with "no ordinary form of constipation" but with life-long dysfunction.

IN "ORDINARY" CASES, Cellothyl is equally effective. In patients taken at random from routine office practice, results were "excellent" or "good" in 92% of cases.[2]

PHYSIOLOGIC CORRECTION—IN THE COLON: Cellothyl provides bulk where it is needed—in the colon. It passes through the stomach and upper intestines as a fluid and thickens to a smooth gel in the colon to provide bulk for soft, moist, easily passed stools.

The usual starting dose is 3 tablets t.i.d., each dose accompanied by at least one glass of water. Daily fluid intake should be high. As normal function returns, the Cellothyl dosage may be gradually reduced.

1. Gastroenterology *13*:275 (Oct.) 1949. 2. N. Y. State J. Med. *48*:1822 (Aug.) 1948.



Cellothyl®

brand of methylcellulose
especially prepared

CHILCOTT
Laboratories division of The Maltine Company
MORRIS PLAINS, NEW JERSEY

SHORT CIRCUITING THE INTESTINO-PORTAL ROUTE

Dramatic Achievement!

BUCCAL ABSORPTION

... entirely new concept in administering the autonomic drugs in obesity

Delfetamine plus synergic atropine has long been the medication of choice for abolishing food-craving and lifting the mood during the weight reduction program. It has now been found that the action of the autonomic drugs is profoundly accelerated and heightened by buccal absorption. The results obtained by this method of administration of the amphetamines and similar drugs have been dramatic in comparison to where such medication has simply been ingested in capsule or tablet form via the longer intestino-portal route.

6 IMPORTANT ADVANTAGES HERETOFORE UNAVAILABLE!

- **Maximum anorexia better assured precisely at mealtime**
- **Anorexigenic and central effects profoundly accelerated and heightened**
- **Optimal effects procurable from lesser dosage**
- **Savory taste of lozenge provides appetite satient value**
- **Sweetness long present in mouth before meal lessens food attractiveness**
- **Easy and inviting method of administration enhances patient cooperation**

TREAT AND TREATMENT COMBINED

DELFETAMINE AND ATROPINE INCORPORATED IN A CANDY-LIKE BASE, SUGARSWEET AND WITH A DELIGHTFUL TRUE-MINT TWANG.

STOCKED BY EVERY WHOLESALE DRUGGIST IN AMERICA

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ADJUNCTIVE TO THE OBESITY DIETARY

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now ... turn the love for sweets to therapeutic advantage in obesity!

TWELVCO

Improved Therapy for the PATIENT with Anemia

"Feel better already," says the patient.

"Rapid improvement in the blood picture," says the physician.

Twelvco provides broad hematopoietic therapy for fast improvement of many macrocytic and microcytic anemias.

Simultaneously it corrects vitamin deficiencies . . . enhances the patient's feeling of well being and return of vigor.

All in one specially stabilized tablet . . . B activity protected.

Available in Bottles of 30 Tablets

Three Tablets Supply:	
Vitamin B_{12}	15 mcg.
Folic Acid	3 mg.
Liver Concentrate	300 mg.
Ferrous Sulphate Anhydrous	195 mg.
Vitamin C (Ascorbic Acid)	450 mg.
Vitamin A	15000 U.S.P. Units
Vitamin D	3000 U.S.P. Units
Vitamin B_1	30 mg.
Vitamin B_2	15 mg.
Vitamin B_6	3 mg.
Niacinamide	150 mg.
Calcium Pantothenate	3 mg.

PHENOLPHTHALEIN

AND THE INTESTINAL TRACT

Loewe, also Bartlett and Herbine[1] established that the rhesus monkey (*Macacus rhesus*) is the most suitable test animal for the biological evaluation of the laxative efficiency of phenolphthalein.

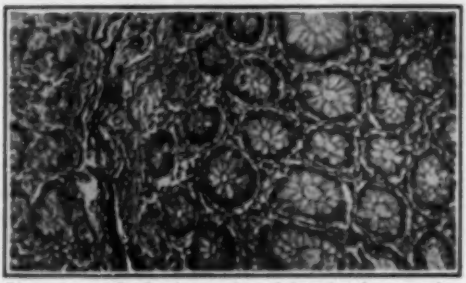
In monkeys that were given repeatedly 200 times their individual threshold dose of phenolphthalein, no untoward symptoms whatsoever appeared. The result was nothing more than gradually lessening laxation for two or three days, followed by normal bowel action, without constipation.

When the organs of the sacrificed animals were examined, there was no sign of intestinal irritation, no inflammatory or pathologic changes in the intestinal tract. Similarly, the liver and kidneys were unaffected and were free from gross or microscopic signs of toxic or irritating influence. The monkeys that were not sacrificed for examination remained normal and symptomless throughout their life span.

The findings of the laboratory are sustained by the clinical experience of numerous observers.

Blick, Berardi and Wozasek[2] demonstrated that phenolphthalein is not an intestinal irritant. Fantus *et al.*[3] used phenolphthalein in varying doses in a large number of normal and constipated subjects and found no mucous strings, protein, and mucus in excess of a certain previously determined normal amount in the stool, leading them to the conclusion that there is no evidence that irritation in the proper sense of the term may be produced by phenolphthalein. Blatt and his co-workers[4] report that no immediate or delayed injurious effect resulted in humans from overdoses in instances where 12, 96, and 130 grains of phenolphthalein were accidentally taken.

These observations furnish impressive evidence of the wide margin of safety of phenolphthalein in very high doses above therapeutic requirements.



Photomicrograph showing section of intestine from monkey receiving 200 times its individual threshold dose of phenolphthalein. No pathologic changes present.

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1. S. Loewe: J. Am. Pharmaceut. Asso. Vol. 28, No. 7, July, 1939.—K. A. Bartlett and R. H. Herbine: ibid.
2. P. Blick, J. A. Berardi, and O. Wozasek: Am. J. Digest. Dis. 9: 292-297, Sept., 1942.
3. B. Fantus and J. M. Dyniewicz: J.A.M.A. 108:439-443, Feb. 6, 1937.
4. M. L. Blatt, F. Steigmann, and J. M. Dyniewicz: J. Pediat. 22: 719-725, June, 1943.

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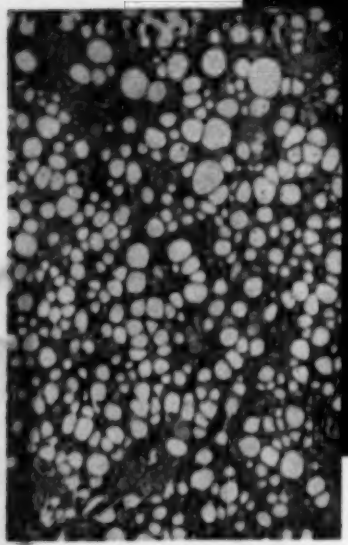
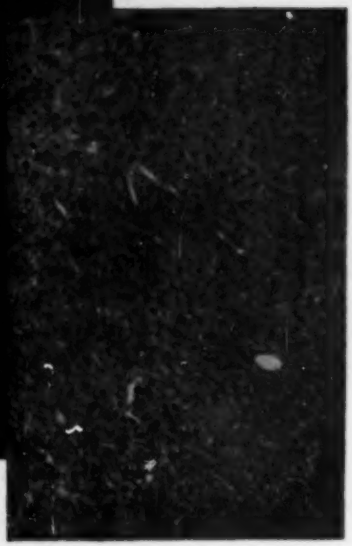
CHOLINE LIPOTROPIC ACTION

IN THE PREVENTION AND REVERSAL OF FATTY INFILTRATION





PATIENT . . . Middle aged female, with history and findings suggesting cirrhosis: loss of appetite, nausea, vomiting, vague gastrointestinal complaints, enlarged liver. Liver biopsy showed extensive fatty changes without fibrosis, indicating that the condition would be still amenable to treatment.

REGIMEN . . . High protein, high carbohydrate, moderate fat, reinforced with vitamin therapy and the lipotropic agent, *Choline (Flint)*. Patient remained ambulatory, except for short period of hospitalization required for biopsy.

RESULTS . . . At the end of four weeks' treatment, a second biopsy was taken, revealing an entire disappearance of the fatty changes. All signs and symptoms of hepatic failure had disappeared.

REMARKS . . . A successful end-result depends on early treatment of fatty infiltration during the prefibrotic stage—diagnosis at this time is governed largely by clinical signs and symptoms.

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LETTERS TO THE EDITORS

—Continued from page 22a

indications that *aluminum* foil may prove a useful prime dressing under pressure dressing. Some papers in Europe report good results; Brown, Farmer, Franks (1948) in Toronto reported fifty cases treated with 0.001" aluminum foil covered by pressure dressing and Denman (1950) recommended it. Most interesting also is the paper by Cooper, Hodge and Beard (1943) who reported the use of papain plus activators for the removal of eschar or devitalized tissues in extensive burns. Dr. Beard reports privately that this use was discontinued due to the toxicity of the salicylate absorbed from the compress solution, but the general method may still be useful. A recent paper by Green, Burns—A Surgical Problem', *American Journal of Surgery* (1950), advocated the use of tincture of iodine on burns, reporting that intense momentary pain is followed by prompt relief of pain and good healing."

Dr. Herbert L. Davis,
New Brunswick, N. J.

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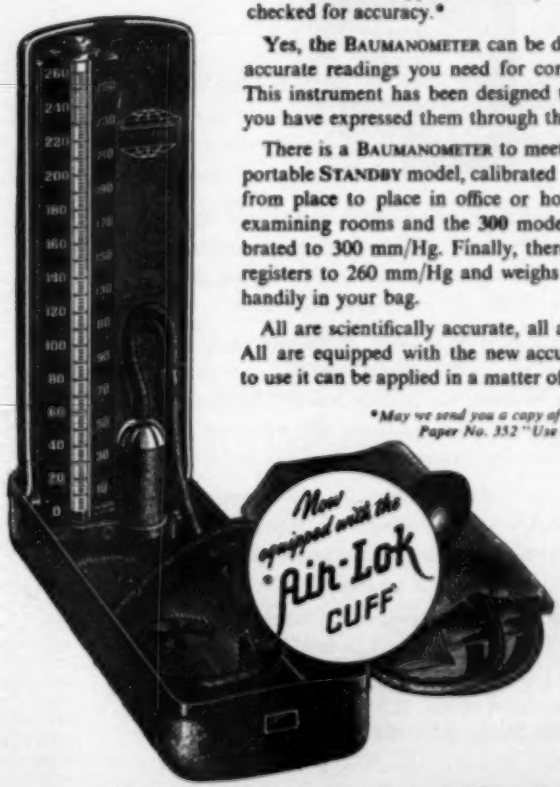
All are scientifically accurate, all are sturdy, and simple to use. All are equipped with the new accurate AIR-LOK Cuff, so simple to use it can be applied in a matter of seconds.

May we send you a copy of U. S. Bureau of Standards Technologic Paper No. 332 "Use and Testing of Sphygmomanometers."



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1. Schwab, R. S. and Leigh, D.: J.A.M.A. *139*:629, 1949.

Geigy

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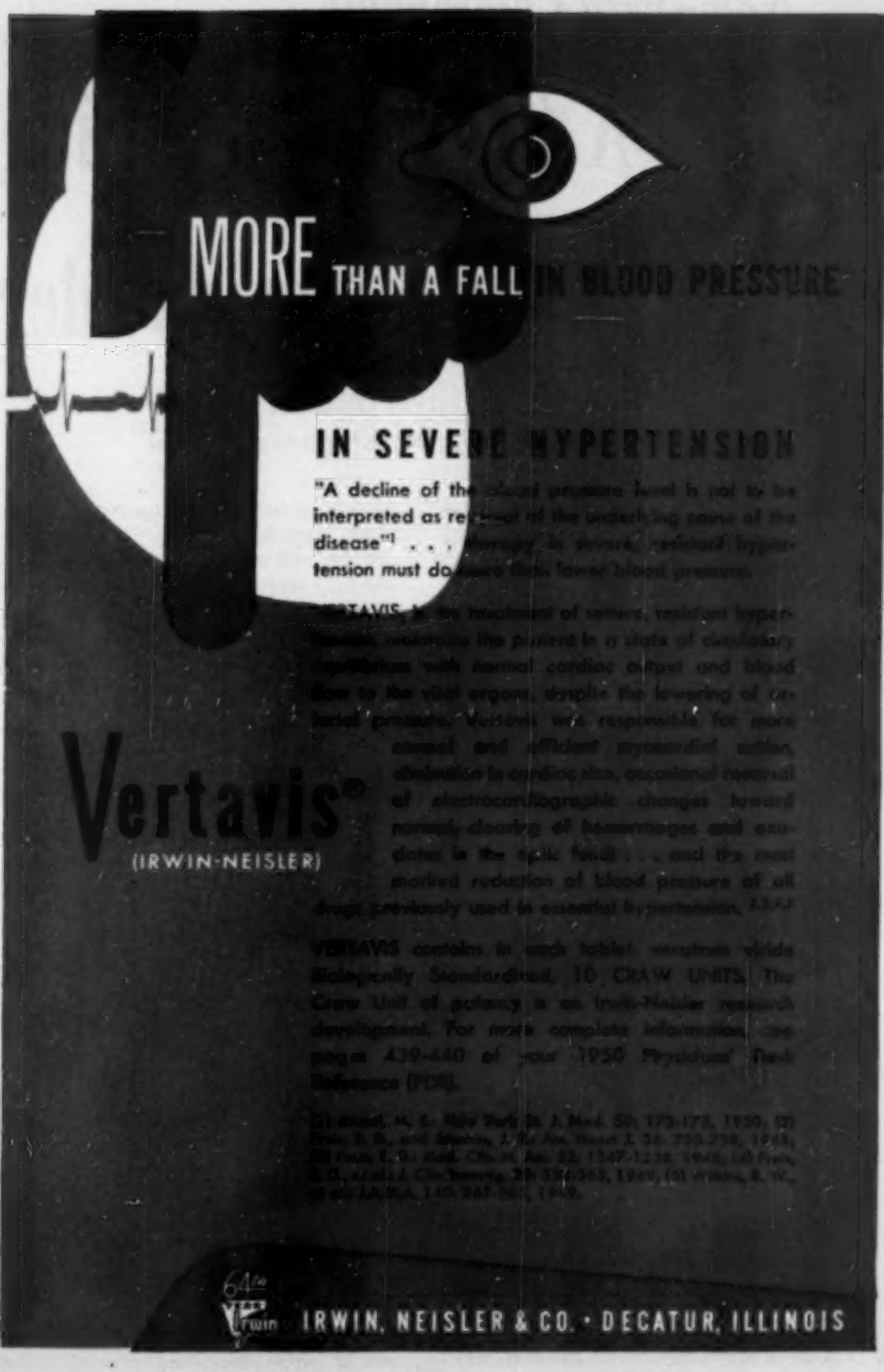
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"A decline of the blood pressure level is not to be interpreted as removal of the underlying cause of the disease"[1] . . . therapy in severe, refractory hypertension must do more than lower blood pressure.
VERTAVIS in the treatment of severe, resistant hypertension, restores the patient to a state of circulatory equilibrium with normal cardiac output and blood flow to the vital organs, despite the lowering of arterial pressure. Vertavis was responsible for more normal and efficient myocardial action, diminution in cardiac size, occasional reversal of electrocardiographic changes toward normal, clearing of hemorrhages and exudates in the optic fundi . . . and the most marked reduction of blood pressure of all drugs previously used in essential hypertension.[2,3,4,5]
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Promotes healthy granulation tissue at the ulcer site—gives prompt, soothing symptomatic relief

A new and fundamental approach to the treatment of chronic and acute peptic ulcers is made possible by Chloresium Powder.

Perfected after three years of research by Rystan Company, originator of therapeutic water-soluble chlorophyll preparations, this combination product assures prolonged contact of *tissue-stimulating* chlorophyll with the ulcer crater.

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1. Promotes healthy granulation tissue at the ulcer site.

2. Gives prompt symptomatic relief.

3. Provides a prolonged protective coating.

4. Provides prompt antacid action—no alkalosis, no acid rebound, no interference with bowel regularity.

5. Completely safe, absolutely nontoxic.

6. Minimizes—often eliminates—need for special diets and restricted activity.

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"The high incidence of patients who have gone through one ulcer regimen after another with temporary relief, but with no healing of the ulcer crater, suggests the need of supplying direct assistance to the damaged gastroduodenal[1] tissues in the form of a tissue-stimulant."

Chloresium Powder provides prolonged contact of tissue-stimulating chlorophyll *with the ulcer crater.*

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To avoid factors whose beneficial effects might be difficult to disassociate from the effects of the Chloresium Powder, no special diets were prescribed. There were no restrictions on smoking, alcoholic beverages or daily activity. Nevertheless, 3 out of 4 cases not only got lasting symptomatic relief in 1 to 3 days, but also obtained *complete healing of the ulcers* in 2 to 7 weeks.

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1. Offenkrantz, W. F., *Rev. Gastroenterol.* 17:359-367 (May), 1950.

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The Hysterical Personality

Recognition and Management in General Practice

HOMER E. LAWRENCE, M.D.
Concord, N. H.

No type of patient is more difficult than the hysteric. In diagnosis she confuses the physician in that hysteria can imitate almost any symptom of organic disease. In management she is demanding. She demands attention, medication, narcotics, and even operation. She easily forms attachments, to her physician as well as to others, but eventually is prone to become dissatisfied because her expectations are not fulfilled.

Hence the hysteric is among the first patients the young physician finds in his waiting room, and is the chief occupant of the category of "medical shoppers." She frequently seeks consultation in the metropolitan clinics, or is referred there by her physician, who finds himself at his wit's end in dealing with her.

The name "hysteria" is derived from the Greek term for the uterus. Plato is credited with originating the ancient belief that the uterus wandered over the body, and that an hysterical symptom occurred at whatever site it lodged. (1) The hysteric almost always lists a uterine suspension or hysterectomy among her numerous operations, so that modern surgery may be said to have proved that the Greeks had the wrong word for it.

As the name implies, classically the hysteric is a woman, and many psychiatrists hold that the true hysterical personality occurs only in women, although conversion symptoms may occur in men.

Hysteria has played a considerable part in the history of all religions; surprising phenomena, always occurring in hysterical people, arouse considerable interest, awe, and emotion. So at times hysterics have been worshipped; at other times they have been burned as witches. Janet (1) describes an early test for witchcraft; it consisted of finding "the devil's claw"—an area of anesthesia on the body or on the mucous membranes. The existence of such an area was considered to be evidence of witchery.

It is the purpose of this paper to point out how the hysterical personality may be recognized by clues uncovered in taking the history and doing the physical examination. Both positive and negative suggestions regarding management will be offered.

The Development of the Hysterical Personality The manifestations of hysteria are generally considered to be the distorted expression of unconscious mental conflict. They arise out of a background of disturbed interpersonal relationships in early childhood. According to the psychoanalytical school of psychiatry the emotional trauma in hysteria takes

place chiefly during the fourth to sixth years when the child's attachment to the parent of the opposite sex is greatest. Rejection of the child at this time may result in feelings of inferiority which are never lost. Fear may enter the picture, to the extent that the individual is always afraid to assume normal adult attitudes toward other individuals and toward his problems. Thus the character of the developing hysteric remains infantile. She demands attention, is sensitive and changeable in her affections, feels inferior, and lacks the capacity for adult attachments and affection. Like a child she wishes only to be loved. She has many fantasies and daydreams, and concentrates poorly on the task at hand.

As adolescence approaches, the child begins to develop the stigmata which help in making the diagnosis of hysteria. The onset of menstruation is almost always accompanied by dysmenorrhea, usually severe enough to keep the girl from school or work. The young woman is often markedly attractive sexually, but actually has no conscious sexual interest. Not infrequently one gets a history of sexual attacks. These may be only fantasy, but on the other hand hysterics, by their dress and mannerisms, tend to provoke advances. However, many of them do not marry; if they do marry they are invariably frigid, or have dyspareunia. This fact is not always openly admitted when the history is taken, but if not, it is usually implied.

Hysterics tend to have "fainting spells," which do not occur in the privacy of the home, but in public places, such as the hotel lobby, the school, and the theater. There may be a history of urinary retention, paralyses, or anesthesias. There is a tendency for certain professional choices among those who do not marry. The hysteric tends to become a dancer, actress, nurse, or nun. If she marries she is unable to offer her husband any real adult warm affection, but is demanding of his affection to an extreme. She seems to have a knack for marrying men who are passive enough to patiently wait upon her, do her work, sympathize with her, and uncomplainingly pay for all of her hospitalizations and operations. If she is fortunate enough to have servants she is unable to get along with them, and always finds reason to discharge them, or provokes them in such a way that they leave. If she has children she has no warm affection for them, and makes a poor mother; she seems unable to manage the children, although she makes great plans for them.

The Manifestations of Hysteria

Hysteria can simulate the symptoms of almost any organic disease. Sensory symptoms are probably the most frequent, and they may be referable to almost any system of the body.

M. B., a 46-year-old housewife, complained of facial pain of one year's duration. It had begun on the left side of the face. Following the extraction of three teeth it had changed to the other side of the face. Then had followed a tour of various dental offices with a succession of negative dental examinations until the patient found a dentist who agreed to remove the teeth from the right side of the mouth. This had not relieved the pain either. A thorough medical study by another physician had resulted in normal findings. The patient had many other symptoms, including life-long dysmenorrhea and dyspareunia. She demanded injections of vitamin B and liver extract although such treatment had not helped her in other hands. She argued long and loudly for her chosen method of therapy and refused to follow the suggested studies to rule out organic causes for her pain.

W. T., a 34-year-old housewife, complained of pain in the left costovertebral angle. This had occurred off and on since childhood, but more frequently during the past four years. 5 years previously a kidney had been said to be "out of place" and she had worn a belt for a few months. There was a history of one episode of urinary retention. Four different fractures had occurred, and the patient had had an appendectomy, cholecystectomy, complete hysterectomy, tonsillectomy, submucous resection, and extraction of all teeth. She "couldn't stand bright lights," and always wore tinted lenses. Five years ago there had been a paralysis of the left leg for ten weeks, said to have been due to a spur on the spine. Three years ago the eyes had temporarily crossed "due to

a hemorrhage at the base of the brain." Dysmenorrhea had been prominent prior to the hysterectomy. The general physical examination, blood count, sedimentation rate, urinalysis, and intravenous pyelogram were all normal.

B. M., a 45-year-old housewife, complained of pain in the neck. It had occurred for six years, but with increasing frequency and severity. There had been an operation for wry neck at the age of 7. Catamenia had ended at 40 with x-ray treatment for small fibroids. Physical examination showed a young appearing woman who was vague about her symptoms. There was a slight tenderness over the cervical muscles. X-ray and laboratory examinations were normal; a neurologist found no abnormalities. The husband stated that several years previously the patient had had a period of paralysis of the left side of the body, and later a paralysis of both legs accompanied by anesthesia from the waist down.

S. L., a 31-year-old housewife, complained of abdominal pain. Ever since adolescence she had had mittelschmerz. Dyspareunia had persisted since her marriage four years previously. Three and one half years ago she had become pregnant, and throughout pregnancy she had had pain in the left lower quadrant, and in the perineum. Post-partum there had been a small perineal abscess; after this was drained she continued to have pain in the perineum. A perineal repair had been done. Two years ago a diagnosis of ovarian cyst had been made by one physician, refuted by another. Urological studies had been done and a "kinked ureter" described. This had been dilated. There was no improvement and a diagnosis of "neuritis" followed. Six months ago the head of the gynecological department of a prominent medical school made a diagnosis of cervical erosion, prolapsed ovaries, and small myomata. A dilatation and curettage, cauterization of the cervix, myomectomy, shortening of the ovarian ligaments, suspension of the uterus, and appendectomy were done. On the first day out of bed the pain returned. The patient's mother and brother had been mentally ill for years. She herself was extremely fearful of insanity. Her marital adjustment had been poor. Her childish behavior in this regard was illustrated by her having concluded a quarrel with her husband by taking her child, getting into her car, and driving away without any money or any place to go. There were symptoms relating to many systems. All examinations were normal.

V. S., a 26-year-old Army nurse, complained of headaches. These, together with dizziness, blurred vision, and weakness of the right arm, had been present nearly four years, during which time she had had nine hospitalizations in Army hospitals. She had in the meantime developed nausea, vomiting, and diminished vision in the right eye. She showed no feeling about the possible implications of some of her apparently serious symptoms. There was a history of bilateral hernia operations, an appendectomy, an exploratory abdominal operation, and a cholecystectomy. There was a stocking anesthesia of the right lower leg and blindness of the right eye. Laboratory and x-ray examinations were normal. Ophthalmological and neurological consultants confirmed the clinical impression of hysteria.

B. P., a 31-year-old housewife, complained of "arthritis" of the left hip and knee. In the past she had had a tonsillectomy, appendectomy, oophorectomy, dilatation and curettage, hysterectomy at the age of 24, and suspension of the right kidney. The present difficulty had been of five years duration, without objective evidence of joint disease. One year ago she had been studied at a university hospital, and had been told that her disorder was entirely a nervous one. Nevertheless, a diagnosis of arthritis had been made in a community hospital and she had been treated with curare. This had not relieved her. On three occasions she had left her husband. On each occasion of pregnancy she had been furious, not wanting to bear children. On superficial examination she appeared horribly crippled; she walked with a bent over position, limping severely in an exaggerated manner. She steadied herself with each step she took, and grimaced with pain. Her general physical examination showed only slight cystic changes in the breasts. Neurological examination showed slightly hyperactive, but equal, tendon reflexes. Laboratory and x-ray examinations were normal. A psychiatrist and a neurologist confirmed the clinical diagnosis of hysteria. Before her discharge from the general hospital it was learned that a bed had already been reserved for her in the arthritic ward of another hospital.

Sensory symptoms other than pain may be prominent, and may involve the special senses. Photophobia is common; hysterics frequently wear tinted lenses. Occasionally the corneal reflex is absent. The visual field is often contracted in "gun barrel" fashion, although the patient does not complain of this.

M. A., a 30-year-old Army nurse, was hospitalized complaining of disturbed vision and hearing, headaches, dizziness, and weakness. During her five years of Army service she had had many hospitalizations, chiefly regarding an injury to the left knee, which had resulted in a traumatic synovitis. Her present difficulty was of one year's duration, and followed allegedly being struck on the head by a berth in a hospital train. There had been no loss of consciousness, but there followed another round of hospitalizations which included neurosurgery in the form of a bilateral parietal and left posterior fossa exploration in search of a chronic subdural

hematoma. None was found. An ophthalmologist found concentric constriction of the visual fields; an otologist found rapidly changing hearing defects by audiometry. These defects were considered consistent with and rather typical of hysterical eye and ear findings.

Dizziness is a rather common complaint among hysterics. When one questions the patient in detail about this symptom it develops that it is not true vertigo but rather a sensation of light-headedness.

Anesthesia may occasionally be demonstrated on physical examination, although the patient seldom complains of numbness. When present it is typically a hemianesthesia of the whole body, or of the face, or it is a glove or stocking anesthesia of an extremity, not conforming to the anatomical nerve supply. Babinski was the first of those who believe that the anesthesia is suggested to the patient by the examination, and that it may not have previously been present. (3) One has the impression that this symptom and sign is much less common now than it was in Janet's day.

Motor phenomena are also perhaps less common in the modern hysteric than among her ancestors. It is the writer's opinion that hysterics perform poorly in tests of muscle strength. Occasionally one sees complete paralyses of one or more limbs, convulsions, weakness, or choreiform movements. Combinations of these, represented by the bizarre and dramatic picture of astasia abasia, are rarely seen.

I. B., a 19-year-old English war bride, was admitted to the hospital after having been taken off the war brides' train in a "coma." She had been born of an English middle class family in a small village. During childhood she had frequently been ill; at times she was thought to have rheumatic fever and on one occasion either chorea or some nervous illness. At the age of seventeen she had been admitted to a hospital in England with difficulty in walking; during hospitalization her legs had become completely paralyzed, but slowly improved. One year ago she married an American soldier, against the vigorous opposition of her entire family. Shortly prior to admission to the hospital the patient had arrived from England on a war brides' ship, and had been put aboard a train for the West, when suddenly she lost consciousness. On admission she was cold and sweating, and lay quietly with her eyes closed. At first she did not respond to questions, but shortly became responsive. However, she remained solitary. When spoken to she answered in an almost inaudible voice. Within a few days her walking rapidly became defective until it was a bizarre gait in which the patient's legs and feet executed violent sudden jerking movements in all directions whereby the patient appeared to be headed for certain injury. This never occurred, but the sight so distressed her fellow patients that they always helped her to walk, and shortly she became completely unable to walk.

B. B., a 36-year-old registered nurse, was hospitalized complaining of inability to use her right arm. Five years previously while drying herself after a shower, she had suddenly had severe pain in the back of her neck. It radiated down the back of her right shoulder and the posterior aspect of her right arm as far as her fingers. Because of this she was unable to use the arm. Traction, heat, and massage were used, but pain continued and weakness and numbness of the arm appeared. A neck brace was applied and she wore a sling on her arm. However, the symptoms all became worse and eventually she was unable to hold anything in her hand. After about eighteen months of symptoms a scalenus anticus operation was performed. From this time on, she had trouble with her voice; it was husky and weak. She also had trouble with her chest in that there was pain on the left side and her chest felt weak. Ever since that time she kept her left chest strapped with adhesive tape. She felt that otherwise she was not able to get enough air into her chest to speak audibly. Two years following onset of symptoms she was examined in a large midwestern clinic, and was told that only conservative therapy should be carried out. However, nine months later, a laminectomy was done in an eastern university hospital without previous x-ray examination of the spinal column and it was said that a herniated cervical disc was found and removed. However, after the operation her symptoms were worse. Ever since that time she had been on codeine one to three grains a day. One year ago a hysterectomy had been performed because of menorrhagia. The patient could not state when in the course of her illness she had begun to develop weakness of the right leg, a limp on the right side, and a gait in which she dragged the right leg. On several occasions recently she had noted excruciating neck pain, followed by epigastric distress, cold sweats, "crampy feelings" and falling to the floor unconscious for a brief period. Prompt recovery without confusion occurred. Physical examination showed slight to moderate atrophy of all the muscles of the right arm, and equal active reflexes throughout. The right visual field was tubular. The voice was husky. There was hypalgesia and hypesthesia of the entire right half of the body. Vibratory and

position sense were similarly affected. Vibratory sense was absent on the right half of the sternum and present on the left half. Laboratory and x-ray examinations were all normal.

Aphonia or mutism is occasionally encountered as a presenting complaint, or an accompanying finding.

T. M., a 36-year-old housewife, complained of loss of voice of five days duration. The onset of this symptom dated from the reduction in the amount of Mother's Aid granted her by the Department of Welfare. She stated she had first lost her voice two years previously, and that it had been gone at that time for about a year. During the intervening year it had been gone intermittently. For the past year she had worn dark glasses because the light hurt her eyes. There were many other complaints as well. There had always been "terrible" dysmenorrhea. General physical examination, serology, complete blood count and urinalysis were normal.

Visceral symptoms are perhaps the most commonly encountered in the modern hysteric.

Sister St. E., a 39-year-old nun, was admitted to the hospital complaining of bowel trouble of 20 years duration. If she went without a bowel movement for two days she would develop "toxic" symptoms consisting of pounding headaches, dull ache in the lower abdomen, drowsiness, nausea, and lassitude. Ever since that time she had seen numerous physicians and had taken many laxatives, tonics, and injections, with no relief. She had finally settled on an enema device known as a "cascade internal bath" which she used each morning, and once or twice each evening as well. The amount of time spent on her bowels seriously interfered with her work. She had had such serious dysmenorrhea that she had gone to bed with it each time. The tonsils and adenoids had been removed, and she had had an appendectomy, removal of an ovarian cyst, and suspension of the uterus. Physical, laboratory and x-ray examinations were all within normal limits. It was felt that her symptoms were the manifestations of a hysterical personality.

A. W. a 29-year-old housewife, was admitted to the hospital complaining of loose bowel movements and pain in the head. Two or three loose bowel movements per day had occurred for two years. They had been accompained by nausea but no vomiting. For the past nine years patient had had intermittent pain in the left side of the head. A diagnosis of sinus trouble had been made and local treatment had been carried out without relief. Local injections in the face had not helped her. Six months ago her whole body had become "numb," and she had been hospitalized. The numbness passed away but the pain remained. Operations were removal of a pilonidal cyst, appendectomy, and suspension of the uterus. She had difficulty in swallowing food most of the time. There were frequent sensations of inability to get her breath. Physical examination showed only absence of the left corneal reflex. Laboratory and x-ray examinations were normal.

Anorexia, nausea and vomiting are frequently hysterical manifestations, and in their extreme form constitute the syndrome of anorexia nervosa. Aerophagia is an occasionally met hysterical symptom. Pseudocyesis is a more striking one.

Among the psychic hysterical phenomena the most dramatic are the amnesias and hysterical fugues of which one occasionally reads in the newspapers. Disturbances of consciousness are not uncommon. In an unconscious patient fluttering of the eyelids may be the first sign that the disturbance is hysterical in nature. If hysteria is strongly suspected, a solution of 0.5 gm. of sodium amytal in 10 cc. of sterile saline solution may be given intravenously at the rate of 1.0 cc. per minute; under this drug hysterically unconscious patients typically become responsive and can be interviewed.

R. P., a 21-year-old telephone operator, was hospitalized because "I pass out." She had always fainted easily. One year ago she became unconscious on the day before her father was to be buried, and remained unconscious for 18 hours, until after the funeral. Six months later she was attacked while on her way home from work, and since that time she had averaged one fainting spell a week. She had never received any injuries in her unconsciousness, nor had there been any convulsive phenomena. She stated that during her attacks she could tell what was going on about her but could not respond. For ten days following the occasion on which she had been attacked she had retained her urine and had been catheterized. She found that often she felt numb all over, so that when she pinched herself she was unable to feel it. She had not had operations or dysmenorrhea. Physical and neurological examinations, laboratory and x-ray examinations were all normal. It was felt that her attacks were rather typically of hysterical nature.

The most common vasomotor symptoms noted are blueness and coldness of the

extremities, particularly if they be paralyzed. Paralysis over a long period of time may result in atrophy of the muscles and demineralization of the bones. It is the writer's impression that temperature variations may at times be hysterical vasomotor phenomena. It is well known that most of the women hospitalized for study of low grade temperature elevations are productive of normal findings throughout.

E. R., a 53-year-old housewife, had multiple complaints. There was a history of bouts of fever with associated malaise. The patient stated that frequently her temperature went to "106 or 107" and that after a hypodermic injection by her physician it would return to normal in two hours. A note from her physician stated that he had given her injections of Vitamin B. The patient had symptoms relative to almost all systems. She had had an appendectomy, a hysterectomy, and a cholecystectomy. There was a history of paralysis of the legs for several days, and also a history of urinary retention and catheterization. Physical examination showed an obese woman who wore tinted lenses and complained of the light hurting her eyes. Laboratory examinations were all normal. A few days later the patient was seen at home complaining of malaise and fever. Her temperature was 102.2. She was given only a placebo. On the following day her temperature was 98 and she felt well again.

Convulsions are occasionally seen. Hysterical convulsions may be hard to differentiate from true grand mal seizures, but they do not bring about as great a physical disturbance. The subject is not exhausted by them, does not have a positive Babinski, is not stupefied, and does not have the subsequent irresistible urge for sleep. She attaches no importance to what has happened. This is the "la belle indifférence" of the hysteric who is not the least concerned by some serious appearing symptom.

The Management of the Hysteric

The management of the hysteric is based upon her complete examination. This includes a detailed history and physical examination, urinalysis, blood count, and special laboratory and x-ray examinations such as might reasonably be indicated by her complaints and findings. One of the difficulties in management is that hysterics may and do have organic disease as well.

E. S., a 49-year-old woman, was admitted to the hospital complaining of abdominal pain with fever. She had had a variety of symptoms and operations throughout her lifetime. Her recent complaint was of non-radiating epigastric pain which sometimes required morphine for relief, and accompanying fever as high as 102 degrees. Her general physical examination showed nothing except a surgically scarred abdomen. However, her cholecystogram showed numerous stones, and while in the hospital she had an attack of epigastric pain, chills and fever rising to 104.6 degrees. At this time her white blood count rose to 19,250. The serum bilirubin increased from 0.5 mg. to 1.2 mg. the day after the attack. The blood lipase and diastase, and urine diastase were not increased. It was felt that this was an hysteric but that her biliary disease was giving her serious difficulty and required surgery.

It is well known that hysterics are very suggestible people. They are the group who are most easily hypnotized. Any measure in which they have confidence will be followed by improvement. This is the reason for their temporary response to placebos, and to various other inert remedies, such as electrical shocks, manipulation, and shrines.

The hysteric is almost certain to have great confidence in the physician who has examined her thoroughly. She will believe what the physician says. She must then be informed that she has no physical condition which could possibly cause a symptom of the kind from which she is suffering. She must understand, however, that there is no suggestion that she is malingering, or "imagining" her symptoms. A number of examples of simple emotional reactions may be given her. Most patients are familiar with such phenomena. They know that the blood vessels and circulation change in such a way as to produce a blush in response to embarrassment. They have seen people vomit on sight of blood or on receiving bad news, and can understand that this does not necessarily mean that such a person has a stomach ulcer or gallbladder disease. They may be familiar with the common emotional symp-

tom of polyuria or frequent loose stools in response to apprehension or emotional stress. They certainly will be aware of rapid forceful heart action as a common result of being startled. With these examples for comparison it may be suggested to the patient that her own symptoms are of similar etiology. Since it has been proved to her by thorough examination that she has no organic disease she has little to do but accept this fact. She may be strongly reassured that the symptom will disappear.

Whenever possible one should try to alleviate the conditions which make the symptom necessary. Possibly the patient will appreciate an opportunity to discuss some of her immediate problems. It may be found that she allows her thinking to be influenced more by wishes and fears than by fact and logic. Perhaps she worries rather than trying to state the problem, analyze it, and resign herself to carry out the best course of action.

For many patients this procedure is all that is necessary.

T. M. readily agreed when it was suggested that her loss of voice might be related to nervous factors. She was an emotionally immature, dependent, childlike individual who felt that the world was obligated to take care of her. During the following three weeks she was seen three times but received no medication; her symptom was ignored except for reassurance that her voice would return. At the end of this time she began to speak normally again.

One does not *cure* hysterics easily. The psychoanalysts find them most difficult to cure even by their time-consuming method. Consequently one sees the hysteric with repeated episodes of varying hysterical symptoms, each episode being handled in a similar way. It must be remembered that the hysteric may develop organic disease at any time.

W. T. was first seen in January 1948, complaining of pain in the left renal area. This pain subsided when a complete physical examination, studies of the urine, and a pyelogram were normal, and she was reassured. During the investigation of this complaint she had another episode of urinary retention of 24 hours duration. She was catheterized and 1100 cc. of urine was obtained. In April 1948 she again had pain in the left flank. The urine was normal, and she responded to reassurance and suggestion. In November 1948 she complained of pain in the legs. Examination was normal, and it was suggested that her obesity and possibly nervous factors might be responsible. The symptom promptly disappeared. In December 1948 she developed backache; this, too, disappeared when it was thoroughly evaluated.

Hysteria may at times be a most stubborn matter with which to deal in that the symptom incapacitates the patient and inconveniences her family to such an extent that drastic measures may be both necessary and justifiable.

I. B., with astasia abasia, was marooned in an east coast hospital, half way from her family in England to her husband in the west, completely disabled by her symptom. Intensive individual psychotherapy with hypnosis as an adjunct was attempted. There was complete lack of success over a period of several weeks. However, after six electro-shock treatments the patient became asymptomatic and left the hospital with her husband.

For details of the positive treatment of hysterics, one is referred to the writings of T. A. Ross (4).

Much may be done by practitioners in preventing a most serious complication to which hysterics are prone—the development of drug addiction. A patient in whom one has made the diagnosis of hysteria, or in whom it is strongly suspected, should get narcotics only when urgently indicated. Prolonged use of narcotics is even more to be avoided in this group of patients. Drug addiction tends to develop in hysterics because of their demands that something be done for their pain.

A second complication of hysteria is what is commonly known as polysurgical addiction. The abdominal symptoms of hysterics may imitate those of any intra-abdominal disease. Their demanding attitudes lead the physician to tend to "do something" about the symptom. Hence the hysteric has her appendix out, then an

ovary, then the uterus, then perhaps the gallbladder, and by this time almost everything removable has been taken out. The question raised by the next attack of abdominal pain is that of the possible presence of intestinal obstruction due to adhesions. Surgery should be carried out upon hysterical women only as the result of the most strict indications.

Summary An attempt has been made to describe the points in the history and physical examination which constitute strong evidence of hysteria. The patient is female, she has had primary dysmenorrhea, often has been subject to fainting spells, may give a history of sexual attack if questioned, may have had a peculiar paralysis or urinary retention, has remained single or made a poor marital adjustment with frigidity or dyspareunia or both. By the time she is recognized as a hysteric she has usually had many operations. On physical examination, if she is young, her dress, make-up and mannerisms may belie her true frigid nature. Frequently she wears tinted lenses, and may have an absent corneal reflex, or "gun-barrel" vision. She does very poorly on tests of muscle strength, such as grip and flexion and extension of the arms and legs. She often shows complete lack of concern, "la belle indifférence", regarding a symptom of apparent seriousness, such as paralysis or a convulsion. In the case of abdominal pain, on the other hand, the complaints may be out of proportion to the objective signs.

Although it is not within the province or ability of the medical man to *cure* the hysteric, he may do much for her. First, and most important, he may prevent her from becoming a drug addict, and secondly, he can help her to avoid unnecessary surgery. Finally, by thorough work, he can instill enough confidence in many hysterics so that they will accept his judgment, findings, explanation, suggestion, and reassurance.

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5 South State Street

Life Expectation Reaches 67.7 Years

Expectation of life at birth among American wage earners and their families increased in 1949 to a new high of 67.7 years. This is based upon the experience among the millions of industrial policyholders of the Metropolitan Life Insurance Company.

The 1949 figure represents a gain of one half year over that for 1948 and of fully five years over the 1939 figure. Average length of life is now about double that recorded among the insured during the period of 1879-1889.

Both sexes shared in the increase in expectation of life between 1948 and 1949, with the gains slightly greater for females than males.

"Females have consistently done better than males in adding to length of life," the Metropolitan's statisticians report. "In consequence white girls at age five, for example, now have an advantage of 5.3 years in expectation of life over white males of the same age."

The improvement in longevity during recent decades has been substantially greater in the industrial population than in the population as a whole. In 1911-1912 the expectation of life at birth among the industrial policyholders was 6½ years below that for the general population; at present, both are on a par.

Gonorrhea

This summarization attempts to cover the essential therapeutic information on the subject and is designed as a time-saving refresher for the busy practitioner.

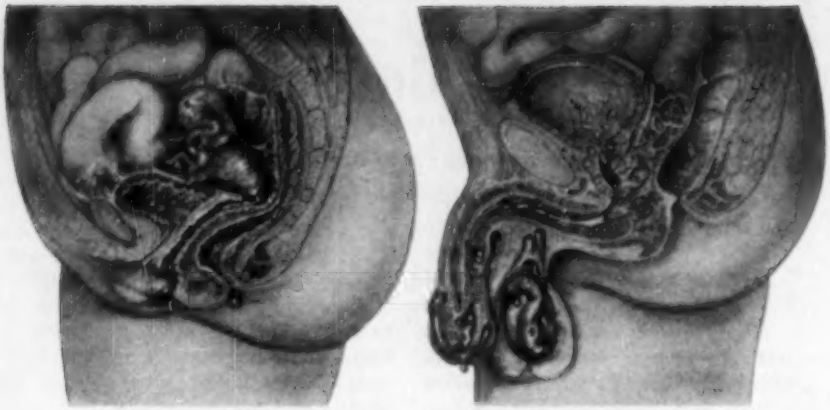
Gonorrhea is an infectious disease caused by the gonococcus organism known as *Neisseria gonorrhoeae*. It involves mainly the mucous membranes of the genito-urinary tract. In some patients the eyes may be involved as well. It may spread to the serous and synovial membranes in other portions of the body. Gonorrhea is considered to be the most widespread venereal disease. It is transmitted chiefly by sexual intercourse. However, it is possible also to acquire the infection by contact with contaminated items such as the hands, instruments, utensils, clothing or bath water. This latter mode of transmission applies particularly if the patient is quite susceptible to the organism. Such is the case especially with female babies and children who have not reached the age of puberty. In the process of delivery the eyes of the fetus can be contaminated by the infected female vagina. After exposure there is an incubation period of 2 to 8 days. However, in most cases evidence of the infection is observed in 4 to 5 days.

Symptoms and Diagnosis in the Male The first sign of gonorrhea in the male generally is an acute anterior urethritis. Symptoms of this condition include a milky urethral exudate, burning on urination and frequency of urination. As the condition continues the quantity of exudate increases. It may thicken and take on a greenish yellow color. It may also be tinged with blood. The pain and burning around the orifire of the urethra increase and the orifice becomes red and swollen. As the disease progresses inflammation and swelling of the entire urethra occurs. The submucosa of the urethra may become inflamed and result in painful erection. Complications such as phimosis, paraphimosis, orchitis, seminal vesiculitis, prostatitis and epididymitis may occur if the patient is not treated immediately.

Diagnosis of gonorrhea is first based upon the symptoms described above. However, such diagnosis should be confirmed by laboratory procedures. A thin smear of the exudate is stained by the Gram method and examined microscopically for the presence of the Gram-negative intracellular diplococci. Care must be taken that the smear is not too thick so that other organisms will not be superimposed upon each other and thus resemble the gonococci. If the organisms cannot be observed in the smear it is necessary then to prepare a culture. Generally this is made from the urethral exudate but in some cases it may be necessary to prepare it from a sediment of the urine or from secretions of the prostate gland. The two-glass urine test is helpful in diagnosing the disease in the early stages. Enough urine must be voided into the first glass so that the anterior urethra is completely cleansed. In gonorrhea this urine will be grossly cloudy and that in the second glass should be clear.

It is important that gonorrhea be differentiated from other infections in the male which may not be sensitive to the

From the Editorial Research Department of the Medical Times, 67 Wall Street, New York 5, N. Y.



Gonorrhea infections in female and male (after Winthrop).
Structures numbered alike behave in a similar manner when infected by the gonococcus.

FEMALE

1. Skene's and vestibular glands
2. Bartholin's glands
3. Cervix uteri
4. Fallopian tubes
5. Rectum
6. Bladder

MALE

1. Parafrenal and periurethral sinuses
2. Cowper's glands
3. Prostate gland
4. Epididymides and seminal vesicles
5. Rectum
6. Bladder

specific therapy for gonorrhea. Such conditions include: intra-urethral chancres and chancroids, nonspecific urethritis or prostatitis, chemical and traumatic urethritis, urethral stricture, trichomonad infestations, subpreputial lesions, and pyuria from the bladder or upper urinary tract. Unfortunately, any one of these diseases also may occur in addition to the gonorrheal infection. Although the history of exposure, the smear and culture are the best criteria for diagnosis in some instances, the two-glass urine test may be used to differentiate non-specific urethritis in that in the first glass there will be shreds of material as well as the cloudiness. However, there also may be shreds observed in gonorrhea. In both conditions there may be pus in the discharge from the prostate gland. Prostatic massage should not be carried out in gonorrhea or in the presence of acute inflammation due to any other organism.

Symptoms and Diagnosis in the Female The symptoms of gonorrhea in the adult female include urethritis, cervicitis, vaginitis, skeneitis and bartholinitis. In very mild infections the symptoms may go unobserved. Frequency of micturition, nocturia, dysuria and in some instances terminal hematuria occur and generally are more severe in patients having the infection for the first time. Examination of the urethral orifice will usually reveal a purulent yellow discharge. If it is not immediately observable digital pressure on the urethra may help to release it. The lips of the orifice of the urethra, as in the male, are generally inflamed and swollen. Examination may reveal some inflammation of the vulva. Burning and itching of the vulva and increased secretions from the vagina are also characteristic. The cervix, too, may be involved as evidenced particularly by inflammation. The discharge from the infected cervix varies from a mild discharge of mucus to a blood-tinged, tenacious purulent discharge in the more severe cases. The Fallopian tubes may be tender and thickened. Gonorrhea of the cervix may be accompanied by leukor-

rhea but in many instances leukorrhea is caused by other infections so that it is not a characteristic symptom.

Definite inflammation and swelling of the vulva and a profuse purulent discharge from the vagina characterize gonorrheal infection in female infants and children. If there are no symptoms or signs other than the profuse vaginal exudate gonorrhea should be considered until there is definite proof that it is not this disease.

Diagnosis in the female is based first upon the signs and symptoms described above. However, for confirmation laboratory procedures are necessary. Smears should be made of the discharges from the urethra, cervix and Skene's and Bartholin's glands and stained by the Gram method. A combination smear from the urethra and Skene's gland may be made by expressing the gland first. Examination of the smear from the female exudates is more difficult because there are numerous other organisms present. There may be other Neisseria organisms present from the genitourinary tract. It is important that they be differentiated from the gonococcus. If there is any doubt a culture should be made. Carbohydrate fermentation also is useful in establishing diagnosis.

It is important that gonorrhea in adult women be differentiated from other conditions which also are responsible for vaginal and cervical exudates. These include such diseases as trichomonad and monilial infections and nonspecific endocervicitis caused by various conditions. Acute cystitis caused by organisms other than the gonococci also shows urinary symptoms similar to those in gonorrhea. Helpful in diagnosing gonorrhea in the adult female is the history of sexual intercourse with an infected male.

Diagnosis of gonorrhea in female infants and children generally is based upon the smear but in many cases a culture may be necessary for the same reasons as in the adult female. Differential diagnosis is necessary because of possible trichomonad and monilial infections. Children may develop chronic infections with alternate acute and mild symptoms.

Proctitis of gonorrheal origin may occur at any age.[1, 2]

Laboratory Procedures Unless the physician has good laboratory facilities and is familiar and skilled in the use of smear and staining technics as well as the process of culturing organisms it is advisable to send the specimens to a competent, reliable laboratory. If immediate laboratory tests cannot be made it is advisable to administer specific therapy for gonorrhea on the basis of a tentative diagnosis until it is confirmed or negated.

Specimens for the laboratory tests are collected on a sterile cotton-tipped applicator by swabbing the male anterior urethra and the female cervix. In order that the swab may be easily inserted into the male urethra it should not exceed ⅛ inch in diameter. If the discharge is very heavy a wire loop may be used. In the female use of a vaginal speculum may be desirable.

The discharge obtained thus is then applied to a glass slide by rolling the applicator over it. The swab should not be rubbed over the slide lest the pus cells be broken and the intracellular position of the gonococci destroyed.

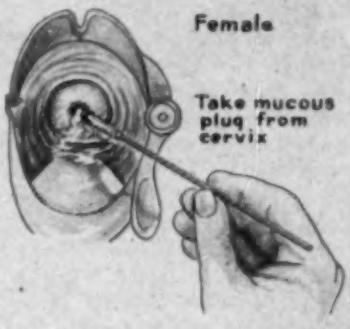
The Gram method of staining is the preferable technic although Löffler's methylene blue may be used. Microscopic examination reveals the gonococci as typical Gram-negative organisms. They are pink to orange-red in color if the Gram staining process is carried out correctly. The organisms are ovoid or coffee-bean shaped and lie in pairs with the flat surfaces together. Usually they are located within the pus cells, a means of identification along with the fact that they appear in clusters. In some smears prepared from the cervix the gonococci may be extracellular.[3]

LABORATORY PROCEDURES

To collect a specimen _____ use a ½ inch cotton swab or a metal loop

Male

Take discharge from anterior urethra



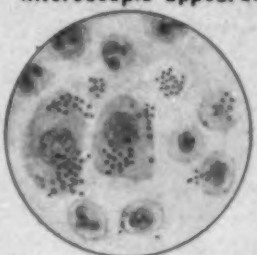
Female

Take mucous plug from cervix

SMEAR

Roll specimen over glass slide

Microscopic appearance



Intracellular and extracellular gonococci in 1st day discharge

CULTURE

Streak loop or applicator gently over chocolate blood agar plate

Colony growth

24 hr. colonies of Neisseria Gonorrhoeae

The specimens for the preparation of cultures are obtained in the same manner and the sterile swab or other instrument is applied directly to the freshly prepared agar plate. The gonococcus organism will not grow on an ordinary medium but does grow easily on chocolate-blood-agar in an atmosphere containing carbon dioxide.[3]

Complications in the Male Unless gonorrhea is treated within a reasonable time of its development complications may arise. In the male these include the progress of the infection into the posterior urethra and prostatic adnexa. In some cases the seminal vesicles, Cowper's glands and urethral follicles may be involved. Prompt and adequate therapy has reduced the possible incidence of vasitis and epididymitis. Although the newer methods of therapy are comparatively specific, if there are other organisms present which are not susceptible nonspecific urethritis and prostatitis may develop after the gonorrhea has been cleared. In such cases additional therapy with other drugs is necessary. The development of stricture must also be handled specifically.

Complications in the Female In the female the resulting complications include acute abscess formation in the Bartholin glands and a continuing infection in Skene's glands. The infection may progress up the reproductive tract and result in chronic gonococcal endocervicitis, endometritis and salpingitis. The infected tubes may be blocked and the patient becomes sterile. If the infection is not controlled it may even result in gonococcal parametritis, pelvic peritonitis and proctitis. If the pelvis becomes involved it is sometimes difficult to differentiate the condition from appendicitis.

Complications in Both Sexes By systemic means the gonococcal infection may be carried to other portions of the body resulting in such conditions as arthritis, iritis, iridocyclitis, keratodermia blenorrhagica, gonococcal myositis, serosynovitis, pleuritis, meningitis and endocarditis. The incidence of these complications has been reduced considerably since a more specific therapy has been used.

Therapy During the acute stage the male gonorrhea patient should be forbidden sexual relationships. Each time after the genitalia have been handled he should wash his hands thoroughly so as not to spread the infection to the eyes. The corona and urethral orifice should be covered with a sterile bag or cap. An athletic supporter should be worn as well. The patient should be instructed to avoid heavy work and any sudden chilling of the body. The bowel movement should be regular and constipation avoided. A bland diet should be prescribed. In order to reduce some of the irritation during micturition alcoholic beverages should be avoided as well.

Penicillin is the drug of choice for systemic treatment of gonorrhea in both female and male patients. The results which have been achieved with its use have been outstanding. Some authorities state that they have not observed any of the so-called penicillin failures in treating gonorrheal infections and that they have not encountered any resistant strains of *N. gonorrhoeae*. They believe that any failures occurring in therapy were due either to the penicillin having lost its potency or not having been potent originally or to the fact that the patient had been reinfected.[4] In most cases a single injection is sufficient but it is important that smears be taken daily for 10 days to 2 weeks in order to insure that a cure has been effected. If this is not the case additional doses of penicillin are necessary.[5] The patient may remain ambulatory. It has been stated that 90 per cent of the cases will be cured by one injection of 300,000 units of procaine penicillin G or a similar preparation, but others claim that repeated injections are required for complete cure. Peni-

cillin also may be given in an aqueous solution containing 50,000 units. However, with this dosage it is necessary to inject it every hour for 4 injections. Ninety-five per cent of all cases can be cured by this routine.[3] Response to penicillin therapy is generally rapid and the relief of symptoms is prompt. If there is no favorable response to penicillin therapy within 3 days it is necessary to administer additional penicillin. The response should be based upon the disappearance or at least a change in type of discharge and the elimination of the organisms as determined by smear or culture. If this does not occur following the first course additional doses of 300,000 to 600,000 units are necessary. In some very resistant cases as much as 500,000 to 1,000,000 units may be necessary. This should be given in doses of 30,000 to 50,000 units every 3 hours. Parenteral administration of single daily doses of 300,000 units of procaine penicillin may be combined with 100,000 units orally. The oral dose should be given 12 and 18 hours after the parenteral dose. This routine may be carried out for several days.

Effective therapy is possible with oral dosage alone provided the patient is conscientious and takes 100,000 units every 3 hours for a period of 1 to 2 days. However, this depends entirely upon the patient's cooperation.

The possibility that penicillin may mask syphilis acquired at the same time should not be overlooked. In patients suspected also of having syphilis it is recommended that serologic tests be carried out each month for 3 or 4 months after exposure so as to be certain that syphilis was not acquired at the same time. The dosages of penicillin employed in treating gonorrhea are well below those for syphilis and they may delay the appearance of secondary syphilis. If Herxheimer's reaction appears in a patient being treated for gonorrhea the presence of syphilis should be suspected.[2, 6]

If the patient is sensitive to penicillin or does not respond properly to it he or she may be given sulfonamide therapy either singly or in a combination. Using sulfadiazine the dosage is 1 Gm. every 6 hours for 5 days. If necessary this may be followed by a second course of 1 Gm. every 4 hours for 5 days. Another routine of therapy is 1.5 Gm. 4 times daily for one week. Currently, the preferred method of sulfonamide therapy is to administer mixtures of the three sulfonamides, sulfadiazine, sulfamerazine and sulfamethazine in which case the total dosage is the same but the quantity of each individual drug is reduced to one-third. Adequate fluid intake and output should be maintained as well as the alkalinization of the urine. It is important that sulfonamide therapy be used only in cases as mentioned above or if penicillin is not available.

If the patient does not respond to penicillin or sulfonamide therapy streptomycin or dihydrostreptomycin should be given. Because secondary bacterial invaders such as *B. coli* and *Pseudomonas aeruginosa* are common occurrences in gonorrhea streptomycin is useful. A single dose of 0.3 to 0.5 Gm. dissolved in distilled water generally is given. Some recommend 0.5 to 1 Gm. as the dosage which is effective in approximately 90 per cent of the patients.[2, 3, 4, 5] Aureomycin and chloramphenicol also have shown value in treating gonorrhea and may be useful in penicillin-resistant cases.

Penicillin is also effective in treating gonorrheal vulvovaginitis in young girls. The adult dosage schedule may be used or the dose may be based upon a ratio of 200 units per pound of body weight to be given at intervals of 3 hours for 6 to 8 doses. If the patient does not respond it may be necessary to give suppositories containing an estrogen to induce the development of adult epithelium which resists the invasion of gonococci more readily.

Some cases of gonorrhea, especially repeated infections, may be resistant to antibiotic and sulfonamide therapy and will require treatment by the older urological methods.

Female patients should be instructed to get plenty of bed rest and particularly during the menstrual period. Phenobarbital in doses of ½ gr. 3 times daily or other sedatives and analgesics may be necessary in some cases. An ice bag may be applied to the abdomen. Bowel movements should be regular and constipation avoided. The vulva should be kept very clean and absorbent pads should be worn so as to prevent the spread of the infection to the rectum and possibly to the eyes.

Some recommend the use of hot cleansing douches whereas others state that vaginal douches or topical applications to the cervix may cause harm. Cauterization of the cervix is definitely contraindicated. If the patient develops salpingitis and a fever, bed rest, proper sedation and penicillin and sulfonamide therapy are indicated. Surgery is sometimes necessary in case of pelvic abscesses and if the Skene's gland is inflamed the external urethral orifice should be dilated very gently and surgery employed to open the gland. External heat may be useful in treating inflammation of Bartholin's glands. Surgery also may be necessary followed by topical penicillin therapy. The vulva should be cleansed with soap and water and an 18 gauge needle inserted into the cavity of the abscess located on the mucosal surface of the vulva. A syringe is used to aspirate the pus and then with a clean syringe 200,000 units of penicillin in 10 cc. of physiological salt solution are injected slowly.[1, 6]

Determination of Cure Cure is determined by the absence of symptoms and signs in the patient and by the absence of gonococci in the smear and culture in a period of 7 days after adequate therapy. However, some feel that the patient should be maintained under observation for at least 21 days. At the end of that time negative laboratory findings indicate cure. If the male has no urethral exudate, no symptoms and the two-glass urine specimens, the smear and culture are continually negative he is considered cured. He may still have an exudate, however, due to the invasion of secondary bacteria. Prostatic massage may be necessary to obtain specimens of the secretion of the prostate in order to test it for the presence of gonococci if the urethral exudate has been eliminated. In the female patient as with the male patient it is necessary that 3 successive smears and cultures be negative. The female patient should be warned, however, that the infection may remain in the fallopian tubes without detection and flare up at a later time. In some cases there may be a serous or mucoid exudate containing a few pus cells which continues for a number of days after therapy has been completed.[1, 2]

Prophylaxis The importance of protecting female children in the home from the infection cannot be overemphasized. In schools or institutions where a child may be found to have the disease extreme caution against its spread should be taken. The vulva of every child should be carefully examined daily at bath-time. All diapers should be sterilized. Each child should have his own toilet articles and soap containers. Showers are preferable to tub baths. Toilet seats, U-shaped and of proper height, should be available. Every child should have his own bed. If a child is proven to be infected he should be kept out of school. New children admitted to any institution should be isolated until three successive smears have been negative.

In regard to the adult male certain precautions can be taken such as the use of condoms in sexual intercourse but this is not entirely reliable although it is the most effective method. Some degree of prevention after exposure is achieved by

immediate micturition and washing of the genital organs with soap and water. An aseptic syringe is then used to inject 6 cc. of a strong silver protein solution or 10 per cent mild silver protein solution into the anterior urethra. It should be retained for 5 minutes. A calomel ointment 30 per cent is then applied to the external area of the genital organs and allowed to remain for 3 hours as a prophylaxis against syphilis in the event that the individual may have been exposed to this disease also.

The incidence of gonorrhea in the armed services has been considerably reduced by orally administering 250,000 units of penicillin as soon as possible after exposure.

Conclusion In treating all cases of gonorrhea in adults it is important that the physician try, in a tactful manner, to learn the identity of the sexual partner so that he or she also can be treated and not continue to spread the infection or reinfect the present patient.

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American Public Health Association

The 78th Annual Meeting of the American Public Health Association and meetings of 32 related organizations in the field of public health and preventive medicine will be held in Kiel Auditorium, St. Louis, Missouri, October 30 to November 3.

More than 400 speakers and discussants will participate in the scientific programs under development by the thirteen Sections. The Sections are: Dental Health, Engineering, Epidemiology, Food and Nutrition, Health Officers, Industrial Hygiene, Laboratory, Maternal and Child Health, Medical Care, Public Health Education, Public Health Nursing, School Health and Statistics.

The Lasker Awards for 1950 for outstanding contributions in medical research and public health administration will be presented on Tuesday evening, October 31. The Sedgwick Memorial Medal, the Association's highest honor, given for distinguished service in public health, will be awarded at the Banquet Session on Thursday evening, November 2. Also at the Banquet Session the address of the President, Dr. Lowell J. Reed, Vice-President, School of Hygiene and Public Health, Johns Hopkins University, will be read.

The Chairman of the St. Louis Local Committee is Dr. J. Earl Smith, Commissioner of Health.

At the Association's 77th Annual Meeting in 1949, the registered attendance was 5,351, representing every state, Canada, Cuba, Mexico, the Latin-American countries and many countries overseas. The attendance at the St. Louis Annual Meeting is expected to exceed this figure. The Annual Meeting of the American Public Health Association is the largest meeting of its kind held anywhere in the world.

The program for the St. Louis meeting will be published in the September issue of the *American Journal of Public Health*. Additional information may be obtained from Dr. Reginald M. Atwater, Executive Secretary, American Public Health Association, 1790 Broadway, New York 19, N. Y.

Hormone Therapy in Cancer

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To understand this subject it is essential to review some of the endocrine experiments made on animals having the cancer virus present.

In the first of these experiments, two groups of female mice were used. One group had the milk factor present and the other did not. Each received the same amounts of estrogenic hormone. In the group with the cancer virus present, 90 per cent thereupon developed cancer of the breast, while in the other group none developed cancer; instead, 10 per cent developed benign tumors of the breast. The important point in this experiment is that the one group, with the cancer virus present, developed nine times more tumors than the other group. This means that the cancer virus sensitizes cells to react to their growth hormone, or to become nine times more sensitive to the growth stimulant. Consequently, a physician must take a great deal more care, in the use of hormones, when treating patients with cancer than he would when treating the average patient without cancer. A doctor must understand hormonal physiology extremely well if hormones are to take an important place in the treatment of cancer.

Practically every tissue in the body is affected in its growth by the hormones. For instance, when animals are castrated changes take place, not only in the secondary sex characteristics but also in such tissues as the mucous membrane of the mouth, salivary glands, and the intestinal glands. The epithelial cells of the salivary glands, for example, change from columnar to cuboidal.

If animals are hypophysectomized, cancer of the breast cannot develop, even though the cancer virus is present and estrogenic hormone is given in large quantities. The pituitary hormone stimulates breast tissue to grow, and tremendously so when the tissue is further sensitized by estrogenic hormone.

If mice are given stilbesterol, 20 per cent will develop pituitary tumors of the gland cells; and these pituitary tumors will put out quantities of pituitary hormone.

Also, if male mice with the cancer virus present are injected with stilbesterol, 20 per cent will develop cancer of the testicle. The first change is an atrophy of the cells of Leydig and then a rapid growth back to normal, but in 20 per cent of the cases the growth continues on into a typical malignancy. In the cancer-resistant animals no cancer developed.

A cancer strain of female mice were injected with estrone, and cancer of the cervix consequently developed. The same experiment done on guinea pigs developed only benign fibroma of the cervix.

In animals with a tendency of 54 per

cent to cancer of the breast, if progesterone is given, the tendency will be cut down to 16 per cent. If testosterone is added it will be reduced to 6 per cent and if they are castrated the incidence will be cut down to 0 per cent.

Mice, with the milk factor present, were castrated at from 1 to 3 days of age, and cancer of the adrenals developed in every case, but when the experiment was done on cancer-resistant mice, only hyperplasia or benign tumors of the adrenals occured. This shows that when, as early as the first three days of life, the testicles are removed, it causes a markedly increased activity of the pituitary and as a result the adrenals are stimulated to grow.

Also, if animals are fed on a high-protein or high-salt diet, the adrenal glands will develop an increased activity and, in some animals, cortical tumors.

It is important in this connection to note that the adrenal cortex makes five hormones—Estrone, Progesterone, Testosterone, Desoxycorticosterone, and Corticosterone.

In mice, with the cancer virus present, the ovaries were transplanted into the spleen. Normally the liver destroys all the ovarian hormone, and so in such an experiment all the ovarian hormone, instead of going into the general circulation, will go through the liver and thereupon be destroyed. Consequently, the pituitary ovarian physiology will be changed thus: the pituitary hormone will stimulate the ovary to function but no ovarian hormone will get to the pituitary to depress its activity. Theoretically this should develop an ovarian malignancy, and that is what happened. When this experiment was done on cancer-resistant animals, no cancer developed; instead, only cystic disease of the ovary.

This experiment was repeated by leaving one ovary in normal position and transplanting the other into the spleen. The pituitary ovarian physiology was not disturbed here, and the transplanted ovary merely atrophied.

In work done by me on virus studies in cancer tissues, and not yet published, it was noticeable that the concentration of virus present in malignant tissue was in direct proportion to the degree of malignancy. A case of cancer of the breast, grade IV, was treated with testosterone, and after one month became grade III; after another month it became grade II. The concentration of virus in the grade IV cancer was high, in grade III it was diminished, and in grade II was markedly diminished. This shows that the same pituitary hormone which stimulates the malignant cell to grow stimulates the virus to grow also.

As a result of this observation pituitary hormone (especially prepared) was used on the agar when culturing cancer virus, and this particular technique has given the best cultures of cancer virus.

In 1940, when Doctor Huggins first showed encouraging results in treating cancer of the prostate with female hormone, I started treating cancer of the breast with male hormone. The first case started on, which was a large inoperable cancer of the breast, is still doing well after 10 years.

The physiological result aimed at was the destruction of as much estrogenic hormone as possible, as well as the depression of the pituitary hormone. It has been well established that the liver destroys estrogenic hormone when functioning properly, but if the level of vitamin B_1 is low, the liver will fail to do this. Consequently, the case mentioned above (a female) was given vitamin B_1. Testosterone was also given in small quantities, just enough to keep the breast tumor regressing.

Another important teaching case was that of an elderly lady with a large recurrent carcinoma of the breast in the glands of the axilla. She was treated with 25 mgms. of testosterone on Monday and Wednesday. On Friday the patient com-

plained of a very dry mouth. This meant that we had reversed her physiology, as was noted in the castration experiment already mentioned. In other words, we had given more male hormone than was necessary. The dose was then cut down to 5 mgms. twice a week for one month. At that time the tumor had regressed to half the size but then it began to grow. Consequently, female hormone was used in 2000 unit doses twice a week, and one month later, the tumor had regressed to a third the size. It then started to grow again, which showed that we had depressed the pituitary as much as necessary, and the hormone itself that was being given was making the tumor grow. Thereupon all treatment was stopped except that of vitamin B_1. The tumor regressed entirely and hasn't recurred.

Some specialists have felt that in treating cancer of the breast with metastases to bone, male hormone should be used, and for soft tissue metastases, female hormone is the best. Actually, I do not feel that there is any difference in the use of either hormone except for the fact that male hormone promotes mineralization of the bone faster than female hormone, which in itself is a healing effect.

Another important phase of physiology is the metabolism of testosterone. If 100 normal women are each given 100 mgms. of testosterone, the next day 50 per cent of the testosterone will have been lost from the system; of that retained about 25 per cent will have changed to female hormone and 25 per cent will have remained as male hormone. But, if one will check those who are extremely masculine, he will find that very little has been changed to female hormone; whereas, of those who are excessively feminine, all will have changed to female hormone. Frequently, girls in this latter group will menstruate following a large dose of male hormone.

For the more the excess hormone in the system, the more that will be metabolized to the other hormone. In other words, the more that physiological doses of the hormone, or only slightly in excess, are used in treating patients the less will be the chance of complications arising from the change to the opposite hormone.

Another important fact in steroid metabolism is that desoxycorticosterone, which is the adrenal hormone that controls salt metabolism, cannot be changed easily to female hormone, and yet this hormone will depress the pituitary in a manner very similar to that of the sex hormones.

In a case of carcinoma of the ovary which filled the entire abdomen and which had been treated with both male and female hormone, desoxycorticosterone in 5 mgm. doses was given daily for 3 months; at the end of that time the abdominal tumor had entirely disappeared. With this type of therapy the blood pressure must be checked frequently.

To understand the physiology of the male sex hormone it is worthwhile to review the subject of underdevelopment in children and the results of treatment. If a boy with undescended testicles is given pituitary hormone the testicles may develop slightly, and if Antuitrin "S" is added an increase in stimulation, of about six times, is obtained. This is still hardly enough to notice, but if testosterone is given the testicles will descend with great rapidity and enlarge rapidly the same as the penis and prostate. This shows that the testosterone acts as a much stronger growth stimulant to the prostate than does the pituitary.

Consequently, when cancer of the prostate developes it is probably true that the testicular function has decreased and that of the pituitary has increased, which in turn has increased the adrenal activity, causing it to form more testesterone. However, it may also be that the testicles have increased their activity, or the patient is taking testosterone, or the liver has lost the power to destroy the hormone.

In treating these cases the condition of

the liver should be improved with diet and vitamins. Male hormone should also be eliminated from the patient's treatment, if he is taking it.

Now, to balance the endocrine system, the patient may be castrated, and if the testicles were making considerable hormone, a noticeable improvement may occur for a few months. The cancer will most likely recur, because with the sudden elimination of male hormone from the testicles, the pituitary will increase its function and stimulate the adrenals to make more testosterone, which in turn will, with the pituitary hormone, stimulate the prostate to grow again.

To prevent this secondary problem of the increased pituitary activity, stilbesterol can be given and this will keep the pituitary from increasing its activity.

A sugar tolerance test is frequently of value in checking for an increase in pituitary activity. This test can be repeated every two months to see that progress is being made in the hormonal balance. The best results are obtained if the sugar tolerance curve can be kept below normal.

Another important point in the treatment is to protect the adrenals against a tendency to overfunction. This is done by stopping all foods supplying cholesterol or high protein as well as meat or salt. The use of vitamin C and fruit in the diet should also be increased. This sounds simple, but now another problem, mentioned in the experiments, arises.

In 20 per cent of the animals given stilbesterol, pituitary tumors develop. This is almost impossible to cope with, for this gland will then continue to over-function whether more or less stilbesterol is given. The best way to prevent the occurrence of this tumor is to give small amounts of stilbesterol.

In 1940, treatment for a far-advanced cancer of the prostate, with metastases to the pelvis, spine, lung and liver was started on this program. The patient, a man, was castrated and given 1 mgm. of stilbesterol daily for one year. At the end of that time there was no evidence of the disease present and treatment was stopped. Three years later the cancer recurred and treatment was started and continued for three more months. By that time, there was no evidence of disease and it has never recurred. At the present time, 10 years after starting treatment, he is in excellent health. He is 85 years old, weighs 200 pounds, and one would judge him to be only about 65 years of age.

When one examines the statistics pertaining to cancer of the prostate in any clinic one fact stands out. Although different treatment may be employed, primarily in the amount of stilbesterol given (from 1 to 300 mgm. daily, for life), the statistics will differ but little from clinic to clinic. Each will show: 10 per cent of the results are good, 15 per cent are fair and the rest of the results are poor. This is significant, for if everyone treated diabetes in this same way, the statistics would likewise be the same.

The reason that we have a satisfactory program for diabetes is because Doctor Best, and all those that followed him, insisted on carefully regulated doses of insulin.

In controlling any endocrine disease, the secret of success is not so much in the hormone used as it is both in the amount used, as well as the degree of balance maintained in the endocrine system, plus the normalization of abnormal physiology. This is essential both in preventing most organic disease as well as in treating any organic disease.

The question arises, in cases of pernicious anemia, with cancer of the stomach, as to whether the cancer might not be stimulated to develop by the use of excess liver extract in treatment. Most pernicious anemia patients, after the anemia is cleared up, are kept on the same amount of liver extract used in the process of the cure.

Cancer of the stomach in pernicious anemia patients, with treatment, is higher than in any other group. Of course, the fact that they live longer than those not treated is a factor, but apparently not the only one.

The primary function of cortisone is to stop allergy. Acute leukemia patients are more allergic to the virus than chronic leukemia patients. Therefore, cortisone should be more effective in treating acute leukemia than chronic leukemia. Cortisone also increases a person's resistance to infection in general, probably in the same way, and therefore would be an extra help in treating acute leukemia where every little infection overcomes the patient.

Theoretically, eosinophilic granuloma should respond to cortisone.

After all of the above statements, one might wonder whether hormone therapy is safe in normal people. It is not only safe but also very important in preventing cancer.

If cancer of the breast, for instance, was due to an excess of female hormone, it would not occur at the times actually observed in life. The body has the greatest amount of estrogenic hormone in the system during the years from 18 to 25 as well as during pregnancy, and yet, at those times cancer of the breast is at the lowest tendency practically. Cancer occurs most commonly when the female hormone level goes low.

When the female hormone level goes low pituitary activity increases. If the level goes low rapidly, many symptoms of the change of life occur. This should be treated with small amounts of female hormone to prevent these symptoms, and in so doing, cancer of the breast will be prevented also.

Cancer of the cervix is similar. Here is found an atrophic cervicitis which tries to heal itself, and before long, the cells are growing at such a rate that a cancer can develop.

With normal hormonal treatment the atrophic cervicitis could have been prevented and even cured, once it developed.

Cancer is an infectious disease in which the causative organism is a virus which sensitizes cells to grow wild and metastasize when stimulated by irritants, chemicals, toxins or excess hormones.

880 East Colorado Street, 1

1850-1950, A Century of Health Progress

The Adams County Medical Society, oldest county medical society in the state of Illinois, is celebrating its 100th anniversary this year.

To commemorate the centennial of this historic, non-profit organization, the society has planned a great public celebration to be held on October 14th through 17th, at Quincy, Illinois.

Among the highlights of the program will be a colorful street parade, a spectacular pageant and a hall of science and progress.

American Urological Association

Urology Award—The American Urological Association offers an annual award of $1000.00 (first prize of $500.00, second prize $300.00 and third prize $200.00) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to men in training to become urologists.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Palmer House, Chicago, Illinois, May 21-24, 1951.

For full particulars write the Secretary, Dr. Charles H. de T. Shivers, Boardwalk National Arcade Building, Atlantic City, New Jersey. Essays must be in his hands before February 10, 1951.

The Antihistamine Chlor-Trimeton

A Review of Its Clinical Investigation

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One of the big difficulties in modern medicine is that drugs are introduced faster than the published articles necessary to provide the physician with the clinical data concerning them. This does not necessarily mean that these new preparations do not have clinical substantiation when they are released upon the market. In fact, adequate substantiation is required by the Food and Drug Administration. However, not only is considerable time required for organizing and writing clinical papers, but the majority of medical journals are many months behind in publishing articles which they have accepted. This is probably more true with the introduction of the antihistamines than with any other class of drugs. Since the appearance of diphenhydramine in 1945, at least twenty antihistamine agents have been introduced commercially. In addition to the twenty or more basic drugs introduced, many variations have been added in the form of capsules, ointments, creams, syrups, elixirs, nasal solutions, and ophthalmic solutions.

Way[1] comments: "Although the literature is well documented in regard to the therapeutic usefulness of the antihistamines for the symptomatic treatment of various allergic disorders, the relative merits of these agents have not been established, mainly because they have been introduced at a rate faster than comparative clinical studies can be made." He further states: "With the possible exception of Chlor-Trimeton, a single dose of virtually every antihistamine falls within the range of 25-100 mg. The dosage, depending upon the condition of the patient, may be repeated at 2-6 hour intervals. It is of interest to note that, although certain manufacturers claim a greater potency and a longer duration of action for their own particular brand, the recommended dosage level and dosage schedule still fall within this narrow range."[1] He further states: "One of the latest agents, Chlor-Trimeton, is reported to have a low incidence of side actions and, in addition, appears to be the most potent antihistamine agent yet distributed. Its usage has became quite popular, at least in the Bay Area. It is surprising to learn, therefore, that to date, clinical evidence in support of the claims of the manufacturer has not been published."[1]

Tislow, et al.,[2] reported on the pharmacological evaluation of prophenpyridamine (Trimeton) and chlorprophenpyridamine maleate (Chlor-Trimeton). They have

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pointed out that "The chlorination of Trimeton in the phenyl ring results in a twenty fold increase in activity without any appreciable change in toxicity. This is in contrast to Benadryl, Pyribenzamine, and Thenylene, the halogenation products of which show no such marked increase in activity."

Loew[3] points out that "Trimeton and Chlor-Trimeton are obviously nearly identical, but differ from all other types of drugs." He also shows that the dose for Chlor-Trimeton is 4 mg. in distinction to 25, 50 or 100 mg. of other commonly used antihistamines.

Reviewing his experience with the use of chlorprophenpyridamine maleate to subsequent hyposensitization therapy in the treatment of seasonal hay fever, Eisenstadt[4] observed some interesting results. In his series of 86 allergy patients treated with chlorprophenpyridamine maleate, side actions occurred in 8 cases (9.3 per cent). Only one of these patients suffered from drowsiness. The other side actions were headache (3 patients), nervousness and excessive stimulation (3 patients), and dizziness (1 patient). The dosage employed was 2 to 4 mg. orally, one to four times daily.

Vickers and Barrett[5] used chlorprophenpyridamine maleate in a series of 40 hay fever patients with severe or moderately severe symptoms. They stated that "In our experience, this is one of the better antihistaminic drugs in use today." Only one of their patients suffered from sleepiness and one each from dizziness and anxiety.

The use of 2 to 4 mg. chlorprophenpyridamine maleate three times daily in 36 cases was reported by Allison and Robinson.[6] In only one instance was any toxic effect noted. This patient complained of a general paresthesia, which subsided upon cessation of the drug. In summary they said: "We commend the use of this drug because of its extremely low toxicity and high therapeutic effect."[6]

Silbert[7] reviewed his experience in studying the effect of chlorprophenpyridamine maleate in 117 patients seen in office practice and hospital outpatient departments. Fifty-eight cases of hay fever were reported, of whom 84 per cent were benefited. Twenty-five patients had vasomotor rhinitis, of whom 72 per cent were benefited. Silbert came to the conclusion that "Chlor-Trimeton Maleate is a therapeutically effective antihistamine particularly beneficial in the treatment of hay fever, vasomotor rhinitis, eczema, neurodermatitis and angioedema. The percentage of patients with allergic affections who are benefited is as great as, if not greater than, that relieved by other antihistamines in common use. The drug possesses an advantage in that a minimum of side effects accompanies its use. The decided benefit derived, with almost complete absence of side effects, warrants the wide use of Chlor-Trimeton Maleate in the treatment of allergic disease."

The use of chlorprophenpyridamine maleate in 133 patients has been commented on by Reicher and Schwartz.[8] In this series, "Only in one case was it necessary to discontinue the drug because of marked drowsiness. In all others, the side effects, including drowsiness, were very slight."

The Committee on Therapy of the American Academy of Allergy[9] officially investigated chlorprophenpyridamine maleate and reported in summary that:

"1. Chlor-Trimeton Maleate is a very effective antihistaminic drug. Like other substances of this type it is most effective in the relief of sneezing and rhinorrhea in allergic rhinitis and in the pruritus of urticaria.

"2. The most effective dosage is 2 to 4 mg. given 3 to 4 times daily. An increase in this dosage does not increase its efficacy, but may prolong its action. The greatest percentage of patients had relief from 3 to 6 hours.

"3. Children with bronchial asthma re-

sponded better to Chlor-Trimeton Maleate than did adults. However, even the younger age groups were not greatly benefited from this drug.

"4. The incidence of side effects of this drug was found to be less than most other available antihistaminics."

A total of 990 patients was included in the survey of chlorprophenpyridamine maleate by this group. From this series it can be seen that the effectiveness of the 2 to 4 mg. dosage has been established and that the drug entails an extremely low incidence of side actions for an antihistaminic compound.

Gaillard [10] reported on a series of 332 office patients to whom chlorprophenpyridamine maleate was administered. His report tabulated 550 symptoms or syndromes observed in these patients. The drug was administered in 1, 2, 4, and 8 mg. doses three or four times daily. In summary, he declared: "Chlor-Trimeton Maleate is a highly effective therapeutic agent, especially useful for the symptomatic relief of hay fever alone or accompanied by other allergic manifestations. It is effective in a dose of 2 to 4 mg. three times daily. Results with the smaller dose appear to be adequate in about half of the cases. Chlor-Trimeton Maleate possesses an extremely low toxicity and is likely to cause no more than 3 per cent severe side reactions." Only three of the 332 patients had severe drowsiness.

Prior to the commercial introduction of chlorprophenpyridamine maleate, the drug was thoroughly studied from the standpoint of histamine antagonism as well as acute and chronic toxicity. From the pharmacological studies it was believed that the drug would be effective clinically in a dosage somewhere between 1 and 10 mg. One of our objectives was to establish the minimum dosage which would produce a high degree of symptomatic relief, yet minimize side actions. Two-milligram tablets of chlorprophenpyridamine maleate were sent to over 200 investigators. These investigators were not the same as those reported in any of the references above, nor those reporting to the Committee on Therapy of the American Academy of Allergy. In all, 208 doctors reported. This group consisted of allergists and internists, for the most part, and general practitioners interested in the treatment of allergy. The following table summarizes the results of the use of chlorprophenpyridamine maleate in 2 to 4 mg. doses three to four times daily by this group:

Effectiveness

	Good	Fair	Poor	Per Cent Effective	Total
Urticaria ..	136	59	33	85%	228
Hay Fever .	542	172	129	84%	843
Vasomotor Rhinitis .	315	134	76	85%	525
Asthma (All Types) ..	103	68	202	45%	373
Angioedema	35	18	9	85%	62
Eczema (Allergic)	24	21	42	51%	87
Other	74	44	48	71%	166
Totals ...	1229	516	539	76%	2284

Side Actions

	Mild	Severe
Drowsiness	221 (9.8%)	45 (1.9%)
Other (nausea, headache, gastrointestinal upset, skin eruptions, vertigo, jitters, dry mouth, dizziness, tachycardia)	53 (2.3%)	28 (1.2%)
Total 274	(12.1%)	73 (3.1%)

The original report form provided for an analysis on the use of 2 mg. doses as compared with 4 mg. doses. Study showed that there was only a 1 or 2 per cent difference in effectiveness of these two potencies, except in the instance of hay fever, where there was an 88 per cent favorable response with the 4 mg. tablets, compared with an 83 per cent effectiveness for the 2 mg. tablets. There was an overall incidence of side effects in 15 per cent,

but only 3.1 per cent were characterized as severe, with 1.9 per cent as severe drowsiness. The most common side effect was a mild and transitory drowsiness. It is noteworthy that only 7 cases of the 2284 reported (0.31 per cent) discontinued the drug during the early stages of the therapy, either because of exacerbation of symptoms or severity of side effects.

Before the commercial introduction of chlorprophenpyridamine maleate, there was ample evidence to show that the drug in 2 to 4 mg. doses was as effective, if not more so, than any other antihistamine on the market and that the incidence of side effects observed with its use was much less than that noted with any other antihistamine. Subsequent clinical data have substantiated these findings. In fact, as of this date (7-11-50), no antihistamine has been reported to be as effective clinically as chlorprophenpyridamine maleate, nor is there any other antihistamine which produces fewer side effects.

Summary and Conclusions The literature on chlorprophenpyridamine maleate (Chlor-Trimeton)* is reviewed. It shows that Chlor-Trimeton is an effective, safe antihistamine in 2 to 4 mg. doses three times daily and that it produces drowsiness in an extremely low percentage of cases. In addition to the cases already reported in the literature, 2284 additional cases reporting on the use of 2 to 4 mg. doses of chlorprophenpyridamine maleate in urticaria, hay fever, vasomotor rhinitis, asthma, angioedema, eczema, and other allergic conditions, are analyzed.

The following conclusions are made:

1. Chlorprophenpyridamine maleate (Chlor-Trimeton) is an extremely effective antihistamine in doses of 2 to 4 mg. three times daily.

2. The incidence of side actions encountered with chlorprophenpyridamine maleate, particularly severe drowsiness, is outstandingly low.

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564 Springdale Avenue.

Aureomycin Shows Promise as Treatment for Mumps

Results obtained in treating three patients with mumps suggest that aureomycin, an antibiotic drug, may be of definite value in this disease, according to two doctors from Sayre, Pa.

Two women treated for mumps with aureomycin showed definite improvement within 24 hours after receiving the first dose of aureomycin, Drs. Wilfred D. Langley and John Bryfogle say in a recent issue of the *Journal of the American Medical Association*. Aureomycin was given to both women on the second day after swelling in the glands began.

Another patient, a man, received the drug less than 24 hours after symptoms of mumps were first noticed. Forty-eight hours after treatment was begun, he showed definite improvement.

"While no definite conclusions can be drawn from treating three patients in the manner described, the results obtained would suggest that aureomycin may be of definite value in this disease," the doctors point out.

Aphorisms

Miscellaneous Truths and Concepts

ANDREW M. BABEY, MD.*
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Editor's Note: From a vast field of medical literature Dr. Babey has garnered the most striking findings and the wisdom of a galaxy of experienced clinicians. They are arranged under the following headings: Cardiovascular (with which we opened the series in the April issue), Chest (which appeared in the May issue), Genito-Urinary (which appeared in the June issue), Nervous (which appeared in the July issue), Gastro-Intestinal Tract (which appeared in the August issue), Blood and Thyroid (which appeared in the September issue), and Miscellaneous with which we are concluding the series in this issue. They constitute for the practitioner a comprehensive post-graduate course whose value can hardly be overestimated.

1. "It is always a pleasant thing to be right, but it is generally a much more useful thing to be wrong."—Clinical Lectures, W. R. Gowers, P. Blakiston, Phil. 1895, p. 21.

2. "More mistakes are made, many more by not looking than by not knowing."—Sr. Wm. Jenner, quoted by Gowers, loc. cit. p. 34.

3. "The First thing in learning is repetition, the second repetition, and the third repetition."—W. R. Gowers, loc. cit. p. 34.

4. "In many cases the best cure for so-called chronic fever is to have the patient throw her thermometer out of the window."—W. Alvarez, Proc. Interstate Post Grad. Med. Assoc. N. Amer. 1941, p. 368.

5. "—if some day we meet great sorrow or cause for worry, we find ourselves terribly tired at the end of the day. In my experience it is not work but painful thinking and painful emotion that weary us human beings."—W. Alvarez, loc. cit., p. 369.

6. "I think it is safe to say that no physician in active practice can make physical examinations which are accurate even up to his own standard of possible accuracy. Such an examination would consume half a day, at least, and even then many points would be left uninvestigated because they seemed relatively unimportant. I think it is well for us to realize that this is always the case and that in consequence it is always our duty to direct our accuracy like a searchlight, where it can do the most good. We must be inaccurate somewhere. The wise physician is he who knows well how to decide, where and when to be accurate, where and when to get along without accuracy."—R. Cabot, Bost. Med. & Surg. J. 151:558, 1904.

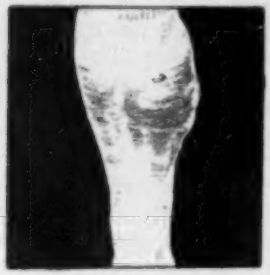
7. "The diagnosis of undulant fever is made too often and usually on the grounds of a positive skin test—the least reliable method of diagnosis."—C. Keefer, Ward Rounds, 1940.

8. "It is dangerous to use hair dyes, but infinitely more dangerous to follow such application with a "permanent wave" for then rapid, serious damage to the bone marrow is very apt to result."—Keefer, loc. cit.

9. "Whenever a person has a chronic septic process, he is liable to phlebitis."—

* Dr. Babey, one time Bowen scholar of the New York Academy of Medicine (research Guy's Hospital, London) is now attached to the attending staffs of the Brooklyn and Kings County hospitals and to the teaching body of the Long Island College of Medicine, now a division of the University of the State of New York, and is the editor of this journal's Book News.

Richard Cabot, Case Records, M.G.H., Jan. 31, 1922.



Phlebetic induration of the calf.

10. "Two statements of patients I have learned to be most cautious about—the color of the urine and jaundice."—R. Cabot, Boston Med. Surg. Jour., 191:31, 1924.

11. "When you don't know what to do, don't do it."—Hugh Cabot, Case 5262, 1919.

12. "I never saw a spleen grow quickly unless there was (1) leukemia, (2) infarction."—R. Cabot.

Extreme enlargement of spleen due to myeloid leukemia.

13. "All infectious diseases, even typhoid, with deep toxemia, will give dyspnoea sometimes."—Richard Cabot, Case Records of M.G.H., August 21, 1923.

14. "Causes of clubbed fingers: (a) chronic lung disease, (b) chronic heart disease of any kind, (c) anything which keeps the diaphragm high so as to restrict the area of lung aeration (ovarian tumor, cirrhosis of the liver, large uterine fibroid)."—Richard Cabot, Case Records of M.G.H., July 3, 1923.

15. "The man who makes the best diagnosis in every case, other things being equal, is the man who has the most facts."—Edward Young, Jr., January 16, 1923, #9033.

16. "If venous obstruction is maintained for 5 or 10 minutes as much as 10 per cent or even more of the water may escape from blood and this change is accompanied by disturbances in the concentration of most of the chemical constituents of the blood. Analyses of samples collected under these circumstances can give only a sorry impression of the actual composition of blood circulating in the vessels of the patient."—John Peters, Bull. N. Y. Acad. Med. p. 422, 1934.

17. "About non-protein nitrogenous constituents has developed a tradition that leads to unnecessary work in the routine determination of nitrogen partitions. . . . Only in the last hours of diseases with profound liver damage is any information of advantage secured by measuring both non-protein nitrogen and urea."—John Peters, loc. cit. p. 424.

18. "In terminal stages of chronic nephritis we get all sorts of ulcerations in the throat."—Richard Cabot.

19. "Sides of feet are favorite site for malignant mole."

Malignant mole.

20. "When people lay stress on the notching of Hutchinson's teeth I am always suspicious that they are not Hutchinson's. It is the sloping in from the two sides towards the middle line rather than the notching that is the most important thing." — Richard Cabot, Boston Med. Surg. J. 191:449, 1924.

21. "There can be a tremendous chill with erysipelas."—. Cabot, Case 7011. M.G.H., 1921.

22. "Two years ago at the University of Minnesota there was a round table discussion on this very subject. Dr. Peters of Yale was asked what criteria to use for determining the amount of salt to give—was it the measure of the excretion of the kidneys, was it the measure of the amount of gastric fluid which was removed, or was it the clinical picture as a whole? Dr. Peters replied, 'It has been asked how we found out that people were hydrated or dehydrated. Well, we can't at the present time. We are peculiarly unable to do so. At present, we must rely on the elasticity of the skin, the general state of the circulation, whether the blood pressure has fallen too far, the serum proteins, etc., but most of all you must look at the patient. No amount of chemistry will eliminate accurate clinical observation'." Editorial, Minnesota Medicine — Sept. 1942, p. 737.

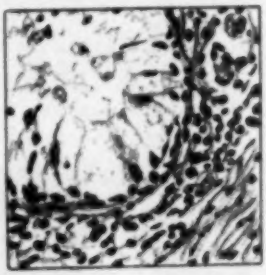
23. "One of the less common but well-recognized complications or sequels of typhoid fever was the obscure, multiple chills which occasionally marked the period of convalescence. Such abrupt rises of temperature and rigors might occur almost daily for two or three weeks without obvious cause, either at the time or afterward. In 16 of these there were well-marked signs of thrombophlebitis, and in every one of the 4 cases in which no signs of thrombophlebitis were observed, there were pulmonary symptoms strongly suggestive of pulmonary embolism."—Conner, N.E.J.M., Jan. 25, 1940.

24. "One of the greatest dangers that confronts the medical profession today is the danger of commercialism. We are living at a time when the passion for spending money has reached an inordinate degree. This means that it must be gotten if it is to be spent. The material out of which doctors are made is no different than that used in making the general run of mankind and it should be strange, indeed, if they were able to keep aloof, wholly, from the trend of the times."—New Eng. J. of Medicine, 203, 287; 1930.

25. "The most important thing about a man is his philosophy."—G. Chesterton.

26. "In peculiar pneumonia think of: Pneumococcus, TB, Tularemia, Virus, Psittacosis, Fungus."

27. "From 10 to 15 per cent of cases of periarteritis nodosa are associated with bronchial asthma. . . . Almost without exception, every case of asthma with a high



Bronchial wall in bronchial asthma showing many eosinophile polymorphonuclear leukocytes.

degree of eosinophilia has periarteritis nodosa."—Dr. Harry Alexander—J. Missouri Med. A., Dec. 1942, p. 373.

28. "Probably the most common cause of bronchial obstruction in an adult is tuberculosis. In these cases the obstruction is brought about in three ways: first, direct pressure of enlarged bronchial glands on the bronchus; second, breaking down of the gland in contact with a bronchus with ulceration and discharge of the infected material into the bronchus; and third, tuberculous ulcerations within the

Tubercular causes of bronchial obstruction.
A. Pressure of enlarged gland.
B. Breaking down of gland.
C. Ulceration within the bronchi.

bronchi."—George Holmes 4-43 371 Northwest Medical.

29. "In any case of chronic arthritis, I think it is a very wise policy to give the patient a course of treatment for gout."—R. Kinsella—Proc. Interst. Post Grad. Med. Assem. N. Amer. p. 15, Oct. 1942.

30 "Many a fat woman has died because her physician failed to feel her femoral ring where she had a little loop

Small incarcerated femoral hernia.

of bowel half the size of a walnut incarcerated."—W. Garch—Proc. Interst. Post Grad. Med. Assembly N. A. Oct. 1942—p. 29.

31. "It has been my experience for many many years that drainage as soon as you make the diagnosis of pleural fluid and repeating it as often as the fluid reaccumulates is the best form of therapy. If you drain early, the necessary repetitions become very few. When the thing recurs more than three times, then your diagnosis of pleural effusion of presumably tuberculous origin is in all probability incorrect and you are dealing with a neoplasm of the pleura or lung."—Henry Christian, p. 66 Trans. Assoc. Amer. Physic. 57:1942.

32. "Even though the physical examination and laboratory studies prove to be negative, the examination of a patient complaining of syncope is not complete until the effects of hyperventilation, of pressure on the carotid sinuses and of motionless standing have been determined."—Eugene Stead, Jr. J. Med. Ass. Georgia, 32: 1943; p. 18.

33. "Dyspnoea is not due to heart failure or obstruction if the heart size is normal. Slow pulse is an asset and low blood pressure is an asset."—P. White, M.D.,—New Orleans Med. & Surg. J., May 1941, p. 565.

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New Virus Laboratory

A Virus Laboratory unit has been established at the University of Illinois College of Medicine for the purpose of training virologists and maintaining a full program of research.

What You Should Know About Medicine

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Medicine was not sired by government. On the contrary it found its birth in "The primal sympathy of man for man". Thus it became one of the most sacred of all human relationships, ranking with the Divine right of worship. When this relationship is interferred with, medicine's highest function is lost.

Modern medicine has reached its present state of efficiency thorugh an evolutionary process. It is not the result of government planning and like religion and freedom of speech, it cannot survive government control. Through new discoveries, sanitary engineering and preventive measures it has kept abreast with progress in other fields of endeavor and made it possible for us to survive the coming of "one world" with the intermingling of the nations with their varied racial diseases and susceptibilities. Medicine has followed the course of nature, not the mandates of government. It has met the needs of mankind as they have arisen.

The function of medicine has been stifled wherever government control has arisen. Experience in other countries shows that the cost of government medicine rises as the quality falls. There is no such thing as free medicine except that voluntarily tendered by the patient's private physician, at his own expense, according to his present privilege as a free agent. The sum total of this free service if paid for by the government would reach deep into the taxpayer's pocketbook and rob the physician of the chastening influence of this voluntary service. Without exception nationalization of medicine has been associated with national decline. Only in small countries with homogeneous socio-economic conditions has socialized medicine attained seeming success. But it has been observed that the people from these countries live longer when transplanted to the U. S. where they have the benefit of voluntary medical service under our system of free enterprise. The United States is the most heterogeneous nation in the world and its citizenry the most independent, therefore, the least adaptable to any form of socialized medicine. It is well known that nationalized medicine, like other functions of the welfare state, destroys individual initiative, honor and integrity, discourages thrift and lessens the will to produce. Thus the socialistic trend now threatening the integrity of free enterprise in the United States will reverse the character building principles upon which our republican form of government was founded. From a medical standpoint this is important because successful medical care is dependent upon full cooperation on the part of both patient and physician.

The hue and cry about the shortage of physicians is largely a result of political propaganda. The United States has more

physicians in proportion to population than any other country in the world except Palestine, where the profession is surcharged with refugee doctors. We have the best system of medical education and the most nearly adequate medical school facilities in the world for the training of physicians. The fear of a serious shortage of physicians in the future is obviously unfounded unless we enter another national emergency. The Federal Security Agency's bulletin recently published under the title, "Health Service Areas" ostensibly to forecast the alleged shortage of doctors by 1960 is founded on false premises. It is inaccurate in its local appraisals and estimates, and as has been suggested, it seems to have been molded to fit "assumed conclusions". This is significant in that the survey has cost the taxpayers a lot of money and its false conclusions are being employed to mislead the people and to highpower medical schools into Federal subsidy and the accompanying danger of control. Also the report unjustly becomes a part of the Federal Security Agency propaganda for compulsory health insurance. The same agency and socialistically minded politicians are overplaying the need of doctors in rural communities. This propaganda has penetrated the public mind and needs to be analyzed and counteracted by fair presentation of the facts. In Great Britain soon after the Health Act went into effect it was realized that the strain on the treasury, the profession and on the nursing service might be eased "quite as much by reducing the number of patients as by increasing the number of nurses and other services." This is an example of what the cold, impersonal hand of bureaucracy can do to people once they come under the rule of the welfare state.

Those who think doctors have deliberately limited the number of medical graduates should know that the number is determined by physical limitations of teaching facilities and not by the doctors engaged in medical education. The required buildings, laboratory equipment and hospital beds are very expensive. More graduates will be forthcoming when the people provide cash for the necessary facilities. This should come from local sources, either through appropriations by state legislatures or public philanthropy. During the past few years, according to an editorial in the *New England Journal of Medicine*, seven four year medical schools have been added to those already in operation and five more are contemplated.

There are good reasons why doctors are not locating at the crossroads in rural communities as they did 50 years ago. Before the turn of the century the country doctor could make a living on typhoid fever, diphtheria, pneumonia and summer complaints. Immunity measures provided by medical discoveries have virtually eliminated typhoid and diphtheria. Sulfonamides, penicillin and aureomycin and other new drugs have rendered pneumonia much less ominous for the patient and much less profitable to the doctor. Refrigeration, sanitation, and improved medication have almost eliminated summer complaints. Improved roads, automobiles, and transportation by air, plus education with reference to clinics and hospitalization tend to whisk the patient by the country doctor while he is being penalized by the new medical publicity and motorized psychology. Considering modern transportation the country patient 50 to 100 miles from the nearest city relatively speaking is much closer to medical care than the patient living 10 miles from his country doctor fifty years ago. Under these circumstances, it is hardly fair to expect the well trained young doctor to invest 30 to 50 thousand dollars for sufficient modern facilities to stop the motored marathon toward city doctors. Are the people and the trend of the times to blame or must the medical profession be held responsible for the dearth of country doctors?

The communities in need of good doctors and desirous of scientific medical care should consider the feasibility of providing modern facilities for the well trained young doctor when one is available. Many of the medical schools are now encouraging students to consider the need of general practitioners in rural locations. Our own medical school is now stimulating interest in country practice by placing senior students with selected general practitioners in rural communities for valuable experience and training.

Apropos the alleged shortage of doctors it seems reasonable to consider the health and physical competency of the nation in the calculation. The population of the U. S. has been doubled since 1900. Average longevity is increasing at a rapid rate. At the turn of the century the lowest maternal mortality rate was 4.3. In 1947 the highest rate was 2.6. At the present time the whole national socio-economic status is being seriously upset by the increased birth rate (sign of physical competency), the saving of life in infancy and the pyramiding of the old age group. Already the burden of old age pensions may be charged to the doctors. Certainly physicians are largely accountable for the above mentioned gains, whether they be considered national credits or debits. But the government gives no credit for these advances and paradoxically cries out for better medicine. The bureaucrats might do well to shoulder the responsibility of finding a better way of life for the ever increasing number of people who because of good medical care live longer and move faster than ever before. Must the people and the physicians accept a system of medical care which will rob them of the scientific, moral and spiritual values which have been responsible for the best medical service in the world? With the known inaccuracies of government bureau surveys and investigations and the administrative incompetency so flagrantly displayed from time to time and the susceptibility to political expediency does it seem reasonable to place our health and our lives in the cold impersonal hands of a government agency?

Our own Indian medical service supplies a shocking example of government failure. Though better managed and more adequately financed the medical department of the Veterans Administration has many shortcomings. Every effort has been made to bring it as nearly in line with civilian practices as government red tape allows and yet many a well meaning VA physician is still struggling through time consuming paper work toward patient welfare. These medical services should have careful study before compulsory health insurance is considered.

Forgetting medicine except as the administration's proposed beachhead for the conquest of all independent industry, should not every loyal citizen take his stand on the question of free enterprise based as it is on the sound principles laid down by our Founding Fathers.

Think of Jefferson, who wrote the Declaration of Independence and championed the constitution of the United States. Think of Washington, who, with modesty matching his valor, declared his reluctance to accept the presidency because of the responsibility of building a republican form of government designed to keep alive the "sacred fire of liberty" and forever furnish a haven of safety from "oppression and misrule". Think of John Marshall who sought to safeguard these principles in the conduct of the supreme court. And finally of Lincoln who left so many burning words mounted on the impefishable wings of truth. Is it not time to listen while this great champion of liberty speaks? "You cannot strengthen the weak by weakening the strong." . . . "You cannot help the poor by tearing down the rich." "You cannot keep out of trouble by spending more than your income." "You cannot build character and courage by taking away a man's initiative and independence." "You

cannot help men permanently by doing for them what they could and should do for themselves." This might well be considered the citizens' Bible brought from polygot jargon and political parleying into plain English. If these principles are put into practice they will afford full protection against the threat of socialized medicine and give a free people their only remaining chance to successfully defend themselves against the catastrophe of the welfare state.

In addition to medicine's routine care of the sick, rich and poor, it has voluntarily become "the guardian of health and life itself". Through the sleepless critical pursuit of scientific research it has thwarted disease, minimized suffering, stayed the hand of death and doubled average longevity. Its phenomenal discoveries, once proven beneficial to humanity, have been made available without thought of commercial gain.

Through scientific advances, medicine has provided the principles for progress in public health and social medicine and has pointed the way for government participation. Finally, it may be said that the medical profession in the United States, conscious of the changing socio-economic picture, is actively encouraging all voluntary insurance programs in an effort to help meet economic emergencies ever arising on account of illness in the lower income groups. Approximately one fourth of the people in the U. S. now have Blue Cross hospitalization insurance. Approximately 15,000,000 are protected against surgical emergencies by Blue Shield and many others are protected by voluntary plans offered by the nation's great free enterprise insurance industry. In the last analysis, our souls, our health, our hopes are dependent upon free enterprise.

Reprinted from the May, 1950 Journal of the Oklahoma State Medical Association.

Veteran Medical Teacher to Retire

After completing 35 years of teaching, Dr. Walter T. Dannreuther will retire as Professor and Chairman of the Department of Obstetrics and Gynecology of the New York University Post-Graduate Medical School, a unit of the New York University-Bellevue Medical Center.

Dr. Dannreuther was first appointed to the staff of University Hospital (then New York Post-Graduate Hospital) in 1914 and has taught at that institution continuously since that time, and since its merger with the New York University-Bellevue Medical Center in November, 1948. Dr. Dannreuther will be appointed Professor Emeritus of Obstetrics and Gynecology of the Medical School after completion of the current academic year, and will continue all his other professional activities.

Many honors came to Dr. Dannreuther during his teaching career. In 1932 he was elected to the presidency of the American Association of Obstetricians and Gynecologists and Abdominal Surgeons. In 1942 he was chairman of the Section on Obstetrics and Gynecology of the American Medical Association. In 1925 he was made president of the New York Medico-Surgical Society, and in 1934 President of the Medical Society of the County of New York. He is a Governor of the American College of Surgeons and was re-elected President of the American Board of Obstetrics and Gynecology in May of this year for the twenty-first time. After graduation from the Long Island College of Medicine, Dr. Dannreuther began his medical career as an intern in the Jersey City Hospital.

EDITORIALS

The Pseudomedicine of the Press

The "enterprising" lay magazines and newspapers consistently exasperate the general profession with their blatant presentations of therapeutic topics lifted from the legitimate medical press, in which presentations sober fact becomes cruelly distorted and misleading pseudomedicine. The cruel factor arises from the consequent frustration of the ill lay reader in search of "miracle" drugs.

The authors of the scientific papers which serve as sources of information for the magazines and newspapers suffer the greatest nausea of all; their reaction sometimes consists in a critcism and correction of the distortions, but the effect of this—and disappointing trial of the miracle drug by the ill—is apt to so disillusionize the lay victims as to lead to the faulty conclusion that a given drug is valueless, with neither commercial nor medical ends served.

The worst feature of this practice is failure properly to clear an article through the original author. More often than not the appearance of the weird representation is unheralded and the shock to the author unmitigated.

So the end result of the exploitation is universal disgust and the bombing of truth with the equivalent of lethal radiation and the intensification of human suffering.

Nevertheless, there is a phase of the medicine of the press that is wholly admirable; the modern world lacking this is unthinkable.

We believe that the press itself can produce antibodies that will heal its noisome ailment.

The right of the sick to truth should be inviolate.

The Nation's Mental Age

At the recent National Conference on Aging, Dr. Edward J. Stieglitz estimated the present mental age of this country as about eight years, and pointed out in proof the fact that any advertising man will admit that if he writes copy for the eight-year-old child, it will sell goods.

Dr. Stieglitz might also have cited the orthodox teaching in schools of journalism, whose faculties are well aware of the facts concerning this matter and prepare their pupils accordingly. If we bear this in mind we will better understand the adolescent and infantile practices of the press and the behavior of large segments of the public.

If we never lose sight of the country's level of mentality we will possess an infallible insight into the political, social, economic and religious exploitation of the masses of people, and into some of the factors making for war.

Because of this fact we live in great danger, since it is taken advantage of constantly by ambitious and unscrupulous men for whom it is a made-to-order asset.

Dr. Stieglitz assumes that the nation will yet attain chronological maturity.

For ourselves, we wonder.

Trojan Horses

The British medical profession was just as much opposed to the National Health Service Act, before surrender, as we are now to compulsory sickness insurance measures.

The strategy of the Health Minister effected an about face on the part of the recalcitrant doctors. What happened? The buying and selling of practices, so large and important a part of the British professional system, was abolished and the consequent loss of equity compensated by the Government through the payment of millions of dollars to the doctors, provided they registered under the National Health Service before July 5, 1948. Since they could not carry the economic penalty imposed, the doctors surrendered to what amounted to coercion, or, if one wishes to call it so, bribery.

In the event of similar legislation ever going into effect in this country, one must try to imagine what the strategy of our political powers would be. Some kind of subsidy would doubtless be offered by the American version of Aneurin Bevan, whoever he might be [an easy guess].

We have to believe that the American profession will always be able to resist nationalizing Greeks bearing gifts. Virgil furnishes the motto: Timeo Danaos et dona ferentes.

Malnutrition Equals Communism

In view of the known relationship of starvation to the spread of communism, one naturally thinks of the vast surplusses of food which have been acquired by the Government and stored at great cost to the taxpayers, the expenditures involved being a means of insuring large profits to the producers of the food and incidentally building political resources.

Instead of meeting the nutritional deficiencies of the peoples of the world who are propagandized by promoters of communism we have depended upon potential power to neutralize beguiling ideologies. Actually, the enemy is hunger. The hungry man is easily bewitched by ideologies but not by ideals.

And this is not saying anything about the hungry among our own people who are only less susceptible to the dynamism of communism thus activated than the starving Asiatics.

Medicine, because of its basic concern with nutrition, is especially interested in a rational means of meeting the menace of communism—distribution, not of bullets, but of food, before all the eggs, butter, cheese, dried milk and poultry spoil.

The problem comes definitely under the head of NUTRITION.

Classical Quotations

● Thus aside from bed rest and sedation, practically all effective therapy in preeclampsia and eclampsia consists of producing water elimination be it by purges, restriction of salt and soda in the diet, or hypertonic glucose or magnesium sulfate intravenously.

Soma Weiss

Proceedings of the International Assembly of the Inter-State Post-Graduate Medical Association of North America, October 13-17, 1941, page 127.

Military Medicine

Medics Too Busy to Observe Birthday

The 175th anniversary of the Army Medical Service on July 27th received no more than passing attention from First Army's doctors, nurses and other medical personnel. The assignment of active duty medical personnel to the Far East Command having further depleted already over-burdened hospital staffs, they were striving to maintain the high standard of medical service so taken for granted by the military and civilians alike.

Aside from tribute paid by three Army-sponsored radio programs, minimum effort was made to bring to the public's attention the almost two centuries of service rendered the nation by its Army Medical Service. Instead, all emphasis was being placed on the need of the Army for additional medical personnel.

As announced by the Department of Defense, the greatest current need is for Medical officers. Medical personnel holding Reserve commissions are urged to volunteer for active duty by immediately contacting The Surgeon General, Department of the Army, Washington 25, D. C., stating their qualifications, eligibility, and the fact that they are volunteering their services.

Hepatitis in Military Personnel

Hepatitis involved an estimated 55,000 military personnel in all theaters during World War II. It is known that the virus of infectious hepatitis is transmitted in the same way as water-borne diseases such as typhoid and intestinal fevers. However, the exact mode by which the virus is transmitted from man to man is not fully understood. Part of this lack of information is because no experimental animal susceptible to the disease can be found.

Aralen Suppresses Malaria in Panamanian Village

Malaria may be entirely eradicated from native populations by the use of weekly suppressive Aralen (Winthrop-Stearns) treatments, according to a report published in the *Journal of the National Malaria Society* by Captain Thomas H. Boldt, U. S. Army Medical Corps, and Sgt. Charles Goodwine, Medical Department, U. S. Army.

This report was based on results of a one-year test of Aralen in the village of Pina, Republic of Panama, which demonstrated that malaria can be suppressed or entirely eradicated from a whole community where Aralen is administered in adequate doses each week.

A total of 282 persons examined during 1947 revealed a cumulative positive parasite rate of 27.7% before the administration of the Aralen suppressive treatment. This rate was reduced to 2.1% by the end of the one-year treatment.

Adults received a weekly dose of 0.5 Gm. and children between the ages of 4 and 14 were given 0.25 Gm. A dose of 0.125 Gm. per week was administered to children under the age of 4 years.

Seven of ten children examined during the experiment showed a positive malaria

test. When examined two weeks later, after receiving two doses (0.125) each of suppressive Aralen, only one child still reacted positively.

This work with Aralen in the field was carried out under the direction of Col. Thomas M. Page, Medical Corps of the U. S. Army, who was formerly Medical Inspector, now Surgeon, United States Army of the Caribbean at Quarry Heights, Canal Zone. In the report written by Capt. Boldt and Sgt. Goodwine, it was pointed out that the suppressive Aralen treatment may be expected to work equally well with a well-disciplined military unit.

Aralen is a development of the Sterling-Winthrop Research Institute of Rensselaer, N. Y. It is manufactured and distributed by Winthrop-Stearns Inc.

Most Army Medical Interns Remain in the Service

Over 75 percent of the medical graduates who interned in Army hospitals under the Military Intern Training Program have remained in the Army longer than their legal requirement for active duty, according to figures released by Major General R. W. Bliss, the Army Surgeon General.

The postwar Military Intern Training Program started July 1, 1947. Since then three groups, totalling 311, have completed internship training in Army hospitals as officers commissioned in the Medical Corps Reserve. At the end of the training period, they could accept Regular Army Commissions, if tendered, and remain in the service. Otherwise, they could either remain on active duty under their Reserve Commissions or return to civilian life.

Of the 311 young physicians who have passed through the program, 235 have elected to remain on active duty in the Army Medical Service, either as Regular or Reserve officers. Of the other 76, several have requested return to active duty after a comparatively brief period of non-military practice. All but seven of the 76 retained their Reserve commission.

Each of the three groups showed approximately the same percentage of post-interns accepting prolonged military service. The first group, which started in 1947, numbered only 25, of whom 19 remained in uniform after completing their training. The 1948 group of 113 found 87 remaining on active duty at the end of the training year. Of the 173 doctors who ended their internships in July, 129 have decided to continue in the Army.

Medical Student Record

Approved medical schools in the United States had a record high enrollment the last school year, according to the Council on Medical Education of the American Medical Association.

Figures released today showed that 25,103 atended the seventy-two medical and seven basic science schools in the 1949-1950 academic year. This represented an increase of 1,433 students, or 6 percent, over the preceding year.

The freshman class of 7,042, the Council reported, was the largest on record, being 5.3 per cent larger than in the preceding year.

Honors for a Member of Our Editorial Staff

At the recent meeting in Buenos Aires, Argentina, of the International College of Surgeons, Dr. Bernard J. Ficarra, Surgery Editor of the Contemporary Progress Department of the MEDICAL TIMES, was elected by unanimous vote an assistant secretary of the International College of Surgeons and a member of the International Board of Trustees of the College.

Medical Economic Research

Prepared by the Staff of the Bureau of Medical Economic Research, American Medical Association

The Road Ahead: America's Creeping Revolution. By John T. Flynn. Cloth. $2.50. Pp. 160. Unabridged special edition. $1. Pp. 207. Distributed by The Committee for Constitutional Government, Inc., 205 E. 42nd St., New York 17, by Special Arrangement with the Publishers, The Devin-Adair Company, 23 E. 26th St., New York 10, 1949.

In Russia socialism entered through sudden violent revolution. In Great Britain it crept in gradually and almost imperceptibly. In both there is government control of industry and loss of individual liberty. John T. Flynn believes that America is following the path of Great Britain. Here socialism is occurring step by step.

Socialism is slowly taking possession of America for the same reason it took hold in Britain: because it is not recognized as socialism, because it is being marketed under various appealing labels which totally conceal its identity. In Britain, a handful of socialists, whose number never became greater than 4,000 and who called themselves the Fabian Society, cleverly laid their plans for establishing a socialist government. Realizing that they could gain power only if their true nature were disguised and if they proceeded gradually and through constitutional processes, they presented their program as "welfarism" and set themselves up as friends of the workers and the underprivileged. Their social reforms, which were presumably for the aid of the underprivileged, were actually a means of making the citizens dependent on the state for the correction of all ills. Every economic dislocation offered them an opportunity to gain favor through their empty promises of the good life, jobs and security for all. Finally, with the economic despair which followed the second World War, their promises gained them full control of the British government.

Mr. Flynn contrasts the Fabian promises with the tragic reality that is now England. Instead of a land of security for all, it is one of austerity for all. Poverty has not been eliminated; it has been distributed. And the freedom of the individual has been circumscribed by ever increasing government controls.

The author does not want America to be lured by the same empty promises. His book is a warning against the socialism that is slowly overtaking this country. This socialism is not the undisguised socialism of Norman Thomas, whose party has received an ever dwindling number of votes at the polls. Rather, it is the much more threatening socialism of the American "Fabians" which is being offered as the "Planned Economy." It is much more threatening because too many Americans do not recognize it and register their disapproval in elections. Following the course of their British counterpart, the American "Fabians" or "Economic Planners" have captured the labor unions and invaded the Democratic Party and have even penetrated our churches. They already occupy

positions of power and leadership in national affairs.

Mr. Flynn notes that in this country, also, the socialists have gained ground in times of economic stress. The American capitalistic system at times is in serious need of repair. Mr. Flynn believes that there should be planning to prevent and eliminate disturbances in our economy. However, a plan to revive the economy of this country should not harbor a plot to replace it with a state-controlled socialist system.

This book is more than a warning. It is an exposé of those persons and groups who are trying to alter the fundamental structure of our society. It enables its readers to sweep aside the web of deception spun by the socialist forces in this country.

Improved Health of the Southern States

Conspicuous success in reducing the toll of preventable disease and premature death in the Southern states during the past decade is reported by the statisticians of the Metropolitan Life Insurance Company. The death rate for these states as a group has been reduced by one-eighth, from 10.4 per 1,000 in 1938 to 9.1 in 1948.

Outstanding has been the ten year decline of 42 percent in infant mortality, and of 74 percent in maternal mortality among white women and 59 percent among the colored.

"Closely related to the fall in infant and maternal mortality has been a marked increase in the hospitalization of births," the statisticians point out. "In almost all of the Southern states the proportion of hospitalized births at least doubled from 1938 to 1948. In West Virginia, Kentucky, and Mississippi the proportion was tripled, and in Arkansas it was more than quadrupled."

Malaria, long a health problem, has fallen off from 135,000 reported cases in 1935 to only 4,000 in 1949. Similarly, during this 15 year period, the number of cases of pellagra reported annually has decreased from many thousands to only a few hundred.

"With the increasing attention being focused upon medical and public health problems, the Southern states will undoubtedly continue to make further rapid advances toward their solution," the statisticians predict.

American Psychiatric Association Project

A clearing house for the interchange of technical information among mental hospitals and other institutions which care for psychiatric patients in the United States and Canada will bring to light the best practices of each hospital for the benefit of all, to the common end that more patients may be restored to their families and communities to lead normal, useful lives.

The new Mental Hospital Service (MHS) was made possible by a grant of $44,500 from the Commonwealth Fund, a private foundation established in 1918 by Mrs. Stephen V. Harkness "to do something for the welfare of mankind," and widely known for its support of projects in medical education and research and health services generally. The grant was for a two-year launching period. At the outset MHS services were to be free to the mental hospitals that requested them. After a suitable trial period, however, MHS was to be made self-sustaining through subscription fees.

The monthly bulletin aims to report briefly but adequately news of current developments in clinical practices, hospital administration, community relations, legislation, architectural planning, accounting procedures, research,—and any and all other types of information which will help the hospitals improve patient treatment and care.

PEDIATRICS

HENRY E. UTTER, M.D.*
Providence, R. I.

Streptomycin - Promizole Therapy of Miliary and Meningeal Tuberculosis in Children

E. M. Lincoln and T. W. Kirmse (*American Review of Tuberculosis*, 61:159, Feb. 1950) report the treatment of 13 cases of miliary tuberculosis and 21 cases of tuberculous meningitis in children with streptomycin and Promizole. In all cases, streptomycin was given by intramuscular injection in a dosage of 1 Gm. daily and Promizole by mouth in a dosage of 1 to 8 Gm. daily, dosage being determined by the concentration of Promizole in the blood. In the cases of meningitis, streptomicin was also given intrathecally in a dosage of 0.5 Gm. to 0.1 Gm. for a series of forty injections. Of the 13 cases of miliary tuberculosis, 11 are living; and of the 21 cases of tuberculous meningitis, 16 are living; some of the patients in both groups are still under treatment and are progressing favorably. Considering the previous high mortality from miliary tuberculosis and tuberculous meningits in children, the favorable effect of the combined streptomycin and Promizole therapy is evident. In meningeal tuberculosis early diagnosis and intensive intrathecal therapy are important in obtaining good results. The age of the child may also be of significance in prognosis, as in the series of cases of tuberculous meningitis, 4 of the 5 deaths occurred in children under fourteen months of age; and of 10 children two years old and less, 4 died in the first ten weeks. These results are in agreement with those reported by others.

COMMENT

Streptomycin alone or in combination with Promizole represents our greatest advance in the treatment of tuberculosis. The results in miliary tuberculosis without involvement of the meninges are excellent, but when meningitis appears as a complication of miliary tuberculosis the process may be stopped but most of these children to date have shown unfavorable after effects due to the cerebral injury which is permanent in these children. Mental deterioration, deafness and blindness are the usual after effects. H.E.U.

Observations on Acute Leukemia in Children Treated with 4-Aminopteroylglutamic Acid

S. D. Mills and associates at the Mayo Clinic (*Pediatrics*, 5: 52, January 1950) report the treatment of 21 cases of acute leukemia in children with 4-aminopteroylglutamic acid (aminopterin), a folic acid antagonist. The ages of the children ranged from sixteen months to eleven and a half years; all but 6 were five years of age or less. Aminopterin was given by intramuscular injection in doses of 0.5 to 1 mg. daily; treatment was continued until the leukocyte count was low or toxic symptoms developed. The most common toxic effect was ulceration of the buccal mucosa and edge of the tongue; 18 of the 21 pa-

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tients showed some toxic effect. In some cases it was possible to continue treatment with diminished dosage, such as 0.5 mg. on alternate days; in other cases, the drug could be withheld for a week to ten days and then resumed. Of the 21 children treated 5 showed complete remissions and 5 partial remissions; one of these patients showed three distinct remission of one to four months; the other 9 showed one remission each of one to three months. During remissions, there was improvement in the general condition, diminution in the size of the liver, spleen and lymph nodes, improvement in the red cell count, and diminution in the number of immature white cells in the blood; the bone marrow showed diminution of immature cells and an increase in erythroid regeneration. At the time that this report was prepared 3 of the children were living, but these 3 have since died. These results are better than have been reported with other forms of treatment in acute leukemia in children, and are in agreement with the results reported by others with folic acid antagonists.

COMMENT

That patients with leukemia are being kept alive with aminopterin is most interesting. Complete cures are not yet reported but it is fair to assume that other compounds will be found which will permanently cure this disease, which hitherto has nearly always been fatal. H.E.U.

Chloramphenicol in Whooping-Cough

James Macrae (*Lancet*, 1:400, March 4, 1950) reports the treatment of 5 severe cases of whooping cough in infants, eight to twenty-four months of age. As whooping cough is known to be more severe in infants than in older children, and the supply of chloramphenicol was limited, it was used only in the severe cases in infants. The dosage was 0.25 Gm. for the first dose, then 0.125 Gm. every six hours for seven days, followed by 0.125 Gm. every twelve hours for another seven days. The chloramphenicol capsules were opened, and the dose of "unprotected" powder was added to a little black currant juice ("ribena") and given by mouth several minutes before a feed. All the infants were cyanotic and having frequent severe coughing spasms when the chloramphenicol therapy was begun. In all cases, the cyanosis and the severe coughing spasms were relieved in twenty-four hours, improvement being noted in twelve hours in some instances. After that, recovery was rapid, and spells of coughing, when they occurred, were mild and of short duration. Although the series of cases is small, the "dramatic" recovery following chloramphenicol in such severe cases appears to justify this preliminary report.

COMMENT

Chloramphenicol offers a distinct advance in the treatment of whooping cough but the number of cases reported has been limited. Antibiotics are being used to a great extent but the results in the treatment of children who have had no protective inoculations can give us the only true appraisal of this form of treatment. It is well known that children who have previously been inoculated present an aborted type of pertussis, particularly in the mildness of the attack and the short duration of the disease regardless of the form of treatment.

It should be emphasized here that all infants should be protected during the early months of their life. The first dose may be given as early as the third month and the dosage should be large. The present combinations of diphtheria, tetanus and pertussis do not give a sufficient dose of pertussis to confer a complete immunity. An extra 15 to 20 billion pertussis vaccine may be safely added to the triple vaccine. If stimulating doses are given once in two or three years during childhood children will, except in a few cases, be completely protected. H.E.U.

Treatment of Edema in Disease of the Kidney

H. H. Boyle and L. B. Jackson (*American Journal of Diseases of Children*, 70:272, Feb. 1950) describe a treatment used for the relief of edema in 15 children with nephrosis or chronic nephritis. This included an acid-ash regimen, liberal use of fluids and restriction of sodium chloride. About 50 cc. of fluid per pound (0.5 kg.) body were given daily; this averaged 1,500 to 2,000 cc. given by mouth when possible. In some cases, in which the children would not take such a large amount of fluid, an intranasal Levin tube was used for a time with intranasal feedings; occa-

sionally 5 per cent dextrose solution in distilled water was given intravenously. The purpose of the high fluid intake was to facilitate the elimination of the mobilized sodium ion. The administration of acid drugs and the acid-ash dietary regimen were employed to aid mobilization of the sodium ion from the alkaline medium of the tissue interspaces. As it was found that children did not tolerate ammonium chloride well, potassium chloride was given in a glycyrrhiza syrup; dilute hydrochloric acid (U.S.P.) was also given, five drops in a glass of water three to four times a day. The diet included acid fruit juices, not yielding an excess of alkaline ash—such as cranberry, plum and prune juice—and acid-ash, high protein foods, chiefly chicken, meat, fish, eggs and cereals. Sodium chloride was restricted to 1 to 2 Gm. daily. Children with nephrosis responded better to this therapy than those with chronic nephritis. All of the 5 children with nephrosis were entirely or partially cleared of edema; and 3 of these children have been followed up through the clinic as free from edema for eighteen months. Three of the children with chronic nephritis did not respond to this or any other form of therapy. In the other cases, with the regimen described, the edema fluid shifted from the face and extremities to serous cavities, especially the peritoneal cavity; by removal of ascitic fluid by paracentesis the child could be made more comfortable. Seven of the children with chronic nephritis died within a year after the onset of edema; autopsy on 6 of the patients showed characteristic changes of chronic or subacute nephritis. This method of treatment is not a cure for nephrosis or chronic nephritis, but it controls the edema more effectively than other regimens employed and makes the patient more comfortable.

COMMENT

We are justified in trying any treatment which will bring comfort to children suffering from the nephrotic syndrome of nephritis. Some children do recover from this type of nephritis but the eventual mortality is extremely high. H.E.U.

A Study of Three Hundred Cases of Diarrhea in Infants and Children

J. D. Levinson and W. B. Raycraft (*Journal of Pediatrics*, 36:316, March 1950) presented a study of 300 cases of diarrhea in infants and children seen in the summer and fall of 1948 in the Children's Division of the Cook County Hospital, Chicago. While the most common symptoms on admission were fever and diarrhea, neurological symptoms were present in 21 per cent of cases and in some of these cases, the neurological symptoms were the initial symptoms making diagnosis difficult. These neurological symptoms occurred most frequently in children under two years of age. Bacteriological study of the stools showed shigella organisms in 26 per cent and salmonella in 5.6 per cent; the organisms of the proteus-paracolon-pseudomonas group in 41.3 per cent. Shigella organisms were found most frequently in patients over one year of age; the proteus-paracolon-pseudomonas group most frequently in children under one year of age. In 26 per cent of the cases the only bacteria isolated from the stools were those of the normal bacterial flora of the intestinal tract. In 32 cases special virus studies were made, but all proved negative. There were 26 deaths in this series, a total mortality of 8.6 per cent, but excluding 10 deaths occurring in the first twenty-four hours after admission, the corrected mortality rate is 5.3 per cent. In addition to general supportive therapy combined sulfadiazine and streptomycin therapy by mouth was more effective against shigella organisms than either alone. In cases due to organisms other than shigella or salmonella, either sulfadiazine or streptomycin by mouth definitely shortened the duration of the diarrhea by about two days. In general treatment the early use of intravenous fluids, including blood and plasma, was an important factor.

GYNECOLOGY

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Estrogen Therapy of Functional Dysmenorrhea: Analysis of Clinical Results

W. J. Dignam, J. T. Wortham and E. C. Hamblen (*American Journal of Obstetrics and Gynecology* 59:1124, May 1950) report a study of 8 patients treated with estrogens for the relief of functional dysmenorrhea. Two of these patients had had dysmenorrhea since the menarche; 5 had had dysmenorrhea for two to six years, averaging 3.6 years; one had had dysmenorrhea for two years, since the birth of her second child. The age of the patients at the time of their first visit to the clinic ranged from eighteen to thirty years, with an average of 21.8 years. Four of the patients were married, but only one had had children. In the treatment of these patients Premarin (conjugated estrogens) was given from the fifth through the twenty-fourth day of the menstrual cycle; the plan of treatment was to determine the dosage which would relieve pain and suppress ovulation; lated it was attempted to reduce the dosage until ovulation occurred but pain was relieved. The time of ovulation was determined by means of basal body temperature charts. The daily dosage of Premarin varied from the equivalent of 0.3125 to 3.75 mg. of sodium estrone sulfate. The 8 patients in this series were treated through a total of 29 menstrual cycles; 2 patients became pregnant during treatment, and the effect on pain was not reported in one cycle, so that the effect of treatment on pain was determined in 26 cycles. All patients given 3.75 mg. of conjugated estrogens daily from the 5th to the 24th day of the menstrual cycle were entirely relieved of pain during the following menstrual period; the lower doses employed relieved pain approximately half the time. The effect of the estrogens on ovulation was not so definite; doses of 0.625 mg. and 0.3125 mg. never suppressed ovulation; each of the doses above 0.625 mg. daily suppressed ovulation about half of the time; a dose that suppressed ovulation one month permitted it to take place another month. The 2 patients who became pregnant during treatment were taking the same dosage of estrogens that had suppressed ovulation in previous months. With one possible exception (in a patient with anxiety hysteria) pain was completely relieved when ovulation was definitely suppressed.

COMMENT

The old adage which say "Dysmenorrhea is always with us" is as true today as ever before. Perhaps more so because of the role many young women now play in the business world. Treatment remains uncertain. There is still no specific therapy. The multiplicity of methods and drugs for its relief proves none are curative in all cases. Endocrine therapy theoretically should "do the job" but in clinical practice it often proves of no avail. The "endocrine experts", with little or no clinical experience, can tell us exactly how to relieve functional dysmenorrhea but in daily practice their recommendations do not always work successfully. The authors have given an excellent analysis of their work with Premarin. We can vouch for the efficacy of this routine. Suppression of the ovulation seems to be the surest way of relieving functional dysmenorrhea. However, the correct diagnosis of the cause must be made, otherwise the treatment is sure to fail. Be wise! Never promise "cure" in dysmenorrhea. H.B.M.

Sulfamylon in the Treatment of Chronic Vaginal Discharge Associated With Sterility

H. C. Moloy (*New York State Journal*

*Diplomate of American Board of Obstetrics and Gynecology.

of Medicine, 50:992, April 15, 1950) reports the use of Sulfamylon combined with Dihydrostreptomycin in the local treatment of chronic vaginal discharge. Before the use of this solution, the cervical and vaginal secretions are examined in a gram-stained smear; if this shows gram-positive or gram-negative organisms in large numbers and absence of Doderlein-like bacilli, the vaginal application of a tampon saturated with the Sulfamylon-Dihydrostreptomycin solution is indicated; the tampon is kept in place for forty-eight hours. Treatments are repeated as necessary until the symptoms are relieved and the pathogenic organisms disappear and Doderlein-like bacilli appear in the smears. It has been found that in a number of cases in which there was cervical erosion and hypertrophy, the application of Sulfamylon tampons in the vagina against the cervix, but not within the cervix, cleared up the cervical lesion. In patients with definite endocervicitis and a profuse discharge which does not respond to treatment with vaginal tampons, the tampons may be applied within the cervix, after removal of the mucopurulent plug. Three patients who had been sterile became pregnant when the use of the antibiotic tampons converted the pathologic flora of the vagina into "a so-called normal flora" at the time of ovulation. This indicates that the toxic effect of pathogenic organisms in the endocervix can injure the sperm and thus prevent conception. Since this method of treatment is simple, it is suggested that the cervical mucus or vaginal discharge should be examined by gram-stained smears in all sterility patients. If small gram-negative or gram-positive organisms are found and Doderlein-like bacilli are absent, the antibiotic tampons should be employed at the time of ovulation to alter the bacterial flora. Even a temporary change in the vaginal flora at this time will allow conception to occur.

COMMENT

Sixty to seventy-five percent of all women complain of vaginal discharge at one time or another. Because of the many causes of leukorrhea there are a multiplicity of methods of treatment. Upon the time of and the degree of extension of the infection will largely depend the likelihood of cure. That chronic vaginal discharge is frequently associated with sterility there is no question. How important this association is, is open to question. There may be—often are—other conditions more important. Treatment is uncertain; often inadequate or a complete failure. The author recommends sulfamylon combined with dihydrostreptomycin applied locally to the cervix by means of a tampon soaked with a solution of the drug. In the canal, a cervical applicator saturated with the same solution is used. Examination of smears parallels treatment. Treatments are repeated until the discharge is relieved or eradicated. This method, of course, is only one of the many ways of treating chronic vaginal discharge associated or not with sterility. We have not used this specific treatment but from an extensive experience we are convinced that local applications for chronic infection is not too successful. In the more recent superficial infection topical applications are curative. Take your "pick of methods" but remember that a change in vaginal flora is conducive to impregnation—often successful. H.B.M.

Sarcoma of the Uterus

W. C. Danforth (*American Journal of Obstetrics and Gynecology*, 59:598, March 1950) from a review of recent literature and from his own experience, concludes that while sarcoma of the uterus is not of common occurrence, the possibility of its occurrence should be kept in mind. Especially in uterine myomas which are large and show a rapid growth, sarcoma should always be looked for; sarcomas that arise in myomas are usually of the spindle-cell type. The treatment of choice is total hysterectomy with removal of the adnexa, yet cases have been reported in literature in which subtotal hysterectomy resulted in a cure. The author reports such a case in which subtotal hysterectomy was done on a diagnosis of uterine myoma and spindle-cell sarcoma was found on pathologic examination; the patient is living and well eleven years after operation. However, in other cases in the author's experience recurrence and death followed subtotal hysterectomy. In cases in which sarcoma, not suspected clinically, is found after subtotal hysterectomy, the author prefers to use deep x-ray therapy rather than attempt a second operation. Endometrial sarcomas arise from the endometrial straoma cells, and may resemble polyps in

the early stage. In one of the author's cases in which a polyp was removed by curettage, sarcoma was found on histological examination; hysterectomy was done within a short time, and careful gross and histologic examination of the uterus showed no evidenec of sarcoma, but this does not indicate that cure would have been obtained by curettage alone.

COMMENT

Does hysterectomy for fibroids that have become sarcomatous cure the patient? Yes and no. There are many points to be considered; most important of which is the type of sarcoma present and whether or not metastases have taken place. If the latter be true, naturally no operation will cure the patient. On the other hand, if the less malignant sarcoma (spindle cell and others) is present, total hysterectomy is curative. Sub-total hysterectomy may or may not cure the patient. Therefore it is easily deduced that total hysterectomy, removing adnexa and cervix, is always the operation of choice. The author's use of x-rays we do not believe is helpful.

It is pretty generally conceded that the x-rays do not kill or stay the growth of sarcoma cells to any considerable degree. If the patient is in good enough condition to withstand a second operation, we believe such operation is indicated. We have several cases of subtotal hysterectomy with removal of adnexa in which sarcoma was diagnosed postoperatively, alive and well from 3 to 20 years with no recurrence. Age does not seem to play an important part. The pathologist in these cases becomes a "post" although one we admire, because solely upon his diagnosis depends the life of the patient—and often the reputation of the surgeon. Every fibroid must be examined by a competent pathologist. H.B.M.

Pregnancy Following Cervix Cancer

J. E. Ayre (*Surgery, Gynecology and Obstetrics*, 90:298, March 1950) reports 2 cases in which cancer of the cervix was discovered in the preinvasive stage by means of routine cervical smear examination. In this cervical cytology test a wooden cervical spatula is used to remove the mucus and surface cells; and a second scraping is done to remove cells from the squamous margin from the deeper layers; the smears are examined with the Papanicolaou stain. The diagnosis of cancer of the cervix in the preinvasive stage is confirmed by a "ring-biopsy", i. e., the examination of multiple sections obtained from the entire ring of tissue that includes the squamous epithelial margin at its junction with the columnar epithelium of the endocervix. The diagnosis was confirmed by this method in the 2 cases reported, although no lesion could be found on examination of the cervix. This ring-biopsy may remove the entire cancer, as in one of the cases reported, but the ring-biopsy was followed by electroconization in both cases. One of these patients had normal pregnancies two and three years respectively after this treatment; and the other patient became pregnant in less than a year. Both patients have been carefully followed up by means of repeated "surface-biopsy" cervical scrapings, and neither has shown any malignant cells in these tests, one more than three years after treatment of the cervical cancer and the other more than a year after treatment.

COMMENT

Prevention is always better than cure. In cancer, prevention and early diagnosis are keynotes in reducing the scourge of cancer. The vaginal smear, using the Papanicolaou stain, has made it possible to diagnose preinvasive or local cancer, which of course is early diagnosis of the first order. Detection clinics have sprung up all over the country and thereby prevention and early detection of cancer is going on at a rate hitherto unheard of. The author has been one of the pioneers in this work. His "ring-biopsy" would seem to be the surest way to "catch" any cancer cells in the area to be biopsied. Conization of the cervix, Dr. Ayre believes, is curative. His 2 case reports of pregnancy following conization without signs of recurrence in from 1 to 3 years following the pregnancy is significant. However, there is still time for recurrence if perchance any cancer cells escaped the conization. Who can tell? This type of management, associated with pregnancy and delivery, in the hands of an expert such as Dr. Ayre is no doubt quite satisfactory. However, your commentator cannot help but feel that the time has not yet arrived when such treatment can be generally recommended with safety. We need more research into the safety of childbirth following conization or cauterization for preinvasive or localized cancer of the cervix. Many questions remain unanswered. H.B.M.

A Clinical Evaluation of 3,500 Vaginal Cytologic Studies

N. B. Reicher and associates (*American Journal of Obstetrics and Gynecology*, 59:860, April 1950) present an analysis of 3,500 vaginal smears, classified according to Papanicolaou's method; none of these smears were of class III, i.e., "suspicious." Smears of class III present a special problem, which will be discussed in detail in a subsequent paper. Of the 3,500 vaginal smears in this series, 3,407, or 97.4 per cent were reported as benign (class I or II) and 93, or 2.6 per cent, as malignant

(class IV or V). By subsequent study 3,415 of these cases were proved to be benign (97.6 per cent) and 85, or 2.4 per cent were proved to be malignant. The highest percentage of errors with the smear study was found in cases of adenocarcinoma of the endometrium in which there were 6 false positives in 19 cases (31.6 per cent) and 5 false negatives in 18 cases proved malignant (27.8 per cent). With squamous carcinoma, the percentage of both false positives and false negatives was much less, the percentage of false negative smears being only 5.9 per cent. Taking the series as a whole there were 9 false negative smears in 85 cases of proved carcinoma; and 17 false positive in 93 cases called positive. In the cases in which the false positives were found, a definite lesion was present but was proved to be benign. In the 83 cases of proved malignancy, the positive smear was the indication for an immediate biopsy in 20 cases, or 23.5 per cent; in one of these cases the patient was entirely without symptoms, the vaginal smear being taken as a routine, and biopsy showed a squamous carcinoma of the cervix in situ. In 17 of the 85 cases of proved malignancy the lesion was a recurrence following radiation therapy. Of these cases, 13, or 76.5 per cent were detected by the vaginal smear. On the basis of these findings, it is concluded that the vaginal smear is "a valuable adjunct" in the diagnosis of pelvic disease, but it cannot be accepted as the basis for gynecologic operation or for not operating "until all other diagnostic criteria have been met."

COMMENT

Vaginal cytology has been a great boon to the early diagnosis of cancer. This also means to treatment, for it has long been known that early diagnosis was the only way we could "cure" cancer. The slogan, "The earlier the diagnosis the surer the cure" has long been applied to cancer. The ability to diagnose cancer in situ is certainly early diagnosis. The authors' report on 3,500 gynecological cases certainly proves the value of routine vaginal cytology. With a "double check" routine, 97.6% were begnign and 2.4% were malignant—85 cases of early cancer; cancers that could be cured. Think of it! The details of this paper should be studied by every practicing physician. It is practical and sane. H.B.M.

OBSTETRICS

HARVEY B. MATTHEWS, M.D., F.A.C.S.*
Brooklyn, N. Y.

A New Simple Method of Fetometry in Breech Presentation

T. E. Rogers, Jr. and E. L. Griffin (*American Journal of Obstetrics and Gynecology*, 59:909, April 1950) describe a method of fetometry in breech presentations. The patient lies on the x-ray table in the recumbent position; the Colcher-Sussman ruler is employed, and is placed on the side of the abdomen closest to the fetal head and at a level with the hand, the position of which is determined by palpation. The x-ray tube is directed so that the central ray passes through the fetal skull; an anode-film distance of 40 cm. has been found to give more accurate results than a distance of 36 cm. In most cases, only one 8 by 10 film is used; the suboccipitobregmatic or biparietal diameter of the fetal head is measured by calipers, the true diameter being obtained from the image of the ruler on the film. If, when the film is developed, it shows that the fetal head is in an oblique position of more than 25 degrees, an abdominal binder is applied over the fetal head

* Diplomate of American Board of Obstetrics and Gynecology.

and a second film is taken. The pressure of the binder has been found to change the position of the fetal head into either the anteroposterior or lateral position so that the measurement could be made accurately in most cases. This method has been used in 50 cases of breech presentation; in most cases the measurements were made during the early stage of labor, and in other cases within three days before labor. After delivery the same diameters of the head that had been measured on the x-ray film were measured on the living infant, and the two compared. It was found that with the technique described, unless the fetal head was fixed in the oblique position, the measurements of the head on the film are accurate within 0.5 cm. in all cases, and in most cases within 0.3 cm. This is sufficiently accurate for the evaluation of cephalopelvic disproportion; the usual Colcher-Sussman technique was used for pelvimetry in these cases.

COMMENT

"Will this head go through this pelvis?" is a question as old as obstetrics itself. Every pregnant woman at term at the onset of labor presents this question. Not infrequently a problem is confronted—that is, the question develops into a real problem, in either vertex or breech presentation, but particularly in breech. Keen judgment is required in borderline cases.

Since the advent of the x-ray many methods and/or techniques have been tried to help or actually determine the important diameters of the fetal head in utero. Up to now none have been entirely successful. Fetometry is still on trial. The authors' technique gives excellent results in their hands but in the less well-trained, we feel it will not work so well. We have tried various methods of x-ray fetometry without nearly the accuracy that the authors record. However, this statement does not mean that fetometry is a complete failure; far from it. Fetometry in breech presentations is particularly helpful and Drs. Rogers and Griffin may be showing us the way for routine fetometry in breech presentation.

H.B.M.

A New View of the Use of Dicumarol in the Pregnant Patient

D. L. Adamson and associates *(American Journal of Obstetrics and Gynecology,* 59:498, March 1950) report the use of Dicumarol at the onset of labor or prior to labor in 15 pregnant women who gave a history of or showed evidence of venous disease. Previously Dicumarol had been given in the puerperium for the prevention of thrombophlebitis and pulmonary emboli. In all cases the method of dicumarolization outlined by Allen and associates was strictly followed. On the basis of the results obtained in the 15 patients given Dicumarol before or at the onset of labor, the authors conclude that any patient who develops acute phlebothrombosis or thrombophlebitis should be hospitalized and given Dicumarol. Such patients, if not adequately dicumarolized at the onset of labor can safely be given 300 mg. Dicumarol immediately after the onset of labor, and should be kept dicumarolized for at least ten days after labor. Any pregnant patient who has not developed acute phlebothrombosis or thrombophlebitis during pregnancy, but who has venous disease or a history of venous disease should also be given Dicumarol (300 mg.) at the onet of labor and also be kept dicumarolized for ten days after delivery. No increase in immediate or delayed postpartum bleeding has been observed in any patient given Dicumarol prior to or at the onset of labor. Such use of Dicumarol, it has been found, markedly decreases the incidence of painful, swollen legs after delivery in women with venous complications of pregnancy, and "will probably decrease" the incidence of pulmonary emboli in pregnancy and the puerperium in women with venous disease.

COMMENT

Dicumarol is a dangerous drug. It is also a very valuable therapeutic agent when employed by those who are thoroughly familiar with its indications and dosage. This is to say very emphatically that an acceptable method of dicumarolization must be followed which also implies adequate laboratory facilities. As stated by the authors, Dicumarol has been employed during the puerperium for the prevention and treatment of phlebothrombosis, thrombophlebitis and pulmonary emboli. This is good treatment. However, we cannot agree wholeheartedly with the authors' use of Dicumarol during the prenatal period. Their results, nevertheless, in 15 cases are certainly impressive. On the other hand, the potential towards causing postpartum hemorrhage would deter us from using the drug prenatally. I remember the death of a young mother who had been given, what was for her at least, too much Dicumarol, and who succumbed to an uncontrollable postpartum hemorrhage. Of course, "One robin doesn't make a spring", but such an accident does make one apprehensive regarding Dicumarol. We congratulate the authors on their excellent results.

We need more such studies. In the meantime, let us all be most meticulous in the use of Dicumarol—particularly during the prenatal period. H.S.M.

The Cervix in Pregnancy

C. E. Galloway (*American Journal of Obstetrics and Gynecology*, 59:999, May 1950) maintains that not sufficient attention has been paid to the cervix during pregnancy, and that visualization of the cervix should be employed in prenatal care. Bleeding in pregnancy may be due to cervical polyps or cervical erosion, and inspection of the cervix is necessary to avoid a wrong diagnosis. The author has found that polyp is one of the most common cervical lesions in pregnant women, and pregnancy appears to predispose to the development of these growths. He has had 3 patients who developed cervical polyps in several pregnancies. In a biopsy study of the cervix in 10 cases during pregnancy, inflammatory infiltration was the most common finding; papillary outgrowths were found in 5 cases, associated with inflammatory infiltration in each case. Decidua was found in 4 of the 10 cases and epidermization in 2 of the 10 biopsies. Further study of the condition of the cervix during pregnancy is indicated, especially as there is apparently some relation between cervical carcinoma and pregnancy, which is not as yet understood. Repeated inspection of the cervix with biopsy, if indicated, during pregnancy will add to our knowledge of this relationship.

COMMENT

The pathology of the cervix in pregnancy has long been neglected. The older obstetricians thought of the cervix as purely a "delivery problem" and paid little or no attention to its pathology. Prenatal bleeding all too frequently is due to pathology in the cervix and not to "pregnancy causes". As the author states, inspection through the speculum is always in order for diagnosis. To this we certainly agree, for the old adage which says "Without a diagnosis there can be no intelligent treatment" is more true today than ever before. Today we have better and more exact methods of diagnosis and when we "forget" to use them the patient "takes the rap". Look at every pregnant cervix—just to be sure. H.S.M.

Adrenocorticotropic Hormone (Acth) in the Etiology of Eclampsia

S. S. Garrett (*Western Journal of Surgery, Obstetrics and Gynecology*, 58:229, May 1950) presents a study of the "striking parallel" between the effects of the administration of ACTH and the changes seen in eclamptic toxemia. In the first place it is noted that the renal damage characteristic of eclampsia is identical with that produced by the administration of ACTH or 11-desoxycorticosterone; the lesions in the heart, brain and liver are also closely similar. The effect of high sodium chloride intake on the kidneys is the same in eclamptic toxemia as with the administration of ACTH or adrenocortical steroids. The blood chemistry in toxemia and in ACTH poisoning is also characterized by hemodilution and slight lowering of the albumin-globulin ratio; with a rise in the blood uric acid. In severe cases of toxemia, the differential blood count is similar to that induced by ACTH. Women with toxemia show an increased urinary excretion of corticosteroids such as follows the administration of ACTH. On the basis of these findings, the author concludes that "the primary etiological factor" in a large percentage of cases of eclamptic toxemia is the increased secretion of adenocorticotropic hormone (ACTH) due to hyperactivity of the pituitary. The author suggests that the use of testosterone and its conjugates should be the most effective treatment for eclampsia due to hypersecretion of ACTH; other drugs of value would be NH_4Cl, chlorine and ascorbic acid.

COMMENT

Since we do not know the etiology of eclamptic toxemia, any study that will throw even a "gleam of light" on the subject is worthwhile. Dr. Garrett has made a very interesting observation on the similarity of the pathology resulting from eclampsia and the administration of adenocorticotropic hormone (ACTH). On the basis of his findings, the author concludes that "the primary etiological factor" in a large percentage of cases of eclamptic toxemia is increased secretion of ACTH due to hyperactivity of the pituitary.

Well, the pituitary has been "blamed" before, and some day some investigator will "come up" with the explanation. Read this article. It will interest you. H.S.M.

Accurate Isometric Roentgen Pelvimetry in the Erect Posture

H. C. March (*American Journal of*

Roentgenology, 63:677, May 1950) describes a method for isometric roentgen pelvimetry with the patient in the erect posture. The erect posture is considered desirable for pelvimetry because with this posture the fetal head is somewhat lower in relation to the inlet or pelvic canal. With the technique described an upright support about five feet high is employed; two aluminum plates and a perforated centimeter rule are clamped to this upright, but adjustable on it. The perforated rule extends horizontally, its zero mark being at the vertical plane of the two plates. The lateral film is taken first, the two aluminum plates serving as contact points for the patient's shoulder and buttock. The perforated rule is raised as high as possible between the thighs of the patient; and the film is placed so that the image of the rule is at the bottom of the film. The device is then removed; the patient is placed so that her shoulders and buttocks touch the vertical roentgen table, and the anteroposterior film is made with the Potter-Bucky tray in the same position as before. These two films may be sufficient for adequate pelvimetry, but the author prefers to take an additional superoinferior film of the inlet with the patient in the semi-sitting position. All the anteroposterior diameters can be determined from the lateral film by the use of the centimeter rule, which is in the mid-sagittal plane of the patient. The transverse diameters are obtained from the anteroposterior film. The fetal skull is measured, either from its long and short diameters or from its circumference; these measurements are accurate only when the head is in or close to the midline. Measurements of breech presentations can also be made if the lateral view includes both the fetal head and the centimeter scale and if the head is in the midline. This method is simple and gives accurate measurements, and is applicable to most women before labor and to a considerable percentage of women in the early stage of labor. It is not applicable to women who cannot stand, either because of bleeding or exhaustion. Another disadvantage is that greater exposure is required for the anteroposterior film with the patient erect than when she is recumbent; in this film there is also less sharpness of detail in the fetal parts. In the lateral film with the erect posture, the uterine fundus tends to fall forward more than with the recumbent posture, so that less of the fundus is included. But the advantages of the erect posture in many cases and the simplicity of the technique have been found of definite value in the author's experience.

Find Chloramphenicol Useful Against Bacillary Dysentery

Good results in treating 35 patients for bacillary dysentery with chloramphenicol (Chloromycetin, trade name) are reported by a research group from Washington, D. C.

"Diarrhea usually subsided within three days, and an uneventful recovery ensued in all 35 patients," Drs. Sidney Ross, Frederic G. Burke, E. Clarence Rice and John A. Washington, and Sara Stevens, B.S., all of the Research Foundation, Children's Hospital, say in a recent issue of the *Journal of the American Medical Association*.

Although sulfadiazine also is effective against the disease, its usefulness is limited, they point out. Causative microbes frequently become resistant to sulfa drugs, occasional patients are sensitive to sulfa compounds, and administering sulfadiazine to dehydrated patients in the tropical areas where the disease is most prevalent may be hazardous.

MEDICAL BOOK NEWS

All books for review and communications concerning Book News should be addressed to the Editor of this department, 1313 Bedford Avenue, Brooklyn 16, New York. When books are sent to us with requests for review, selections for that purpose are promptly made.

Brain Tumors

DIAGNOSIS AND TREATMENT OF BRAIN TUMORS AND CARE OF THE NEUROSURGICAL PATIENT. By Ernest Sachs, M.D. 2nd Edition. St. Louis, C. V. Mosby Co., [c. 1949]. 8vo. 552 pages, illustrated. Cloth, $15.00.

This book is a discussion of brain tumors from the point of view of the neurologic surgeon. It is of value to the medical student as an adjunct to his customary neurologic training inasmuch as it is concerned not only with identification and localization of the lesions but also with their operative accessibility and anatomic relationships to other structures. The interne will find the book of assistance in familiarizing himself with diagnostic and surgical procedures peculiar to neurologic surgery. The practitioner in other fields will find it useful as a reference book when he occasionally requires more detailed information about a particular neurosurgical procedure.

EVERETT W. CORRADINI.

Surgery Illustrated

ILLUSTRATIONS OF SURGICAL TREATMENT. By Eric L. Farquharson, M.D. 3rd Edition. Baltimore, Williams & Wilkins Co., [1949]. 8vo. 391 pages, illustrated. Cloth, $7.00.

This is a well written presentation on fractures and a few conditions usually treated by orthopedists. The methods of treatment are extremely conservative. There is only casual mentioning of operative procedures in the management of fractures. All procedures are standard and well established. The last 125 pages are filled with pictures of surgical instruments.

ROBERT V. MARTIN.

Ophthalmology

THE EYE AND ITS DISEASES. Edited by Conrad Berens, M.D. 2nd Edition. Philadelphia, W. B. Saunders Co., [c. 1949]. 4to. 1,092 pages, illustrated. Cloth, $16.00.

In 1936 we reviewed the first edition of this book in these words:

"One cannot comment on this book without involving himself in superlatives. Topics that would ordinarily be treated as separate monographs, such as Injuries to the Eye, or Surgery of the Eye, have been treated in comprehensive and scholarly fashion by authorities who have won renown in their respective fields. The bibliographies following each of the many chapters are thorough and valuable . . . Throughout the text the reader feels that the editor has been ultra-cautious in the selection of his contributors and their material, including the illustrations. All this has been arranged into a sequential and harmonious text. Dr. Berens and his associates have made a worthy contribution to the cause of ophthalmology and medicine with this fine textbook."

Though 13 years have passed since the publication of the first edition, one still prizes the first edition for its permanent

—Continued on page 496

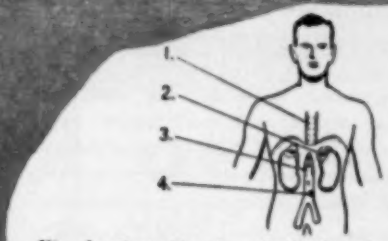

Fig. 1. Typical locations of epinephrine-producing tumors.
1. Thoracic Paraganglia.
2. Adrenal Medulla (10 per cent of tumors bilateral).
3. Abdominal Paraganglia.
4. Organ of Zuckerkandl.

Fig. 2.

Pathologic specimen of a pheochromocytoma. (*Courtesy of Becker, Bass, and Robbins, Beth Israel Hospital, Newark, N. J.*)

For the detection of Hypertension-producing
PHEOCHROMOCYTOMAS

Intravenous tests with Saline Solution of Benodaine* Hydrochloride indicate whether or not elevated blood pressure is caused by an epinephrine-producing pheochromocytoma.

This new Merck diagnostic aid, when administered intravenously in suitable doses, is adrenolytic but not sympatholytic.

In patients with hypertension caused by a pheochromocytoma, Benodaine produces a brief but significant decrease in blood pressure. In hypertensive patients who do not have this tumor, it produces either no significant change in blood pressure or a moderate elevation of short duration.

Complete literature is available upon request.

*Benodaine is the trade-mark of Merck & Co., Inc. for its brand of piperoxane.

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(Brand of Piperoxane Hydrochloride)

(2-(1-Piperidylmethyl)-1, 4-Benzodioxan Hydrochloride Merck)

—Continued from page 494

value. Much of the original material with slight modifications has been preserved, though one now notes 92 contributors as compared to 82 in the 1936 edition, and 76 chapters instead of 73. The additions and changes have been commensurate with the period which has elapsed.

EMANUEL KRIMSKY.

Heart and Blood Vessels

CARDIOVASCULAR DISEASE. FUNDAMENTALS, DIFFERENTIAL DIAGNOSIS, PROGNOSIS AND TREATMENT. By Louis H. Sigler, M.D. New York, Grune & Stratton [c. 1949]. 8vo. 551 pages, illustrated. Cloth, $10.00.

This textbook of five hundred and twenty-seven pages is divided into thirty one rather brief chapters. The illustrations are good, and the references listed following each chapter, are particularly well chosen.

This book is to be recommended to all interns, and general practitioners for a sound and ready reference on all questions related to cardio-vascular disease. In limiting the volume to clinical cardiovascular disease, all discussion and reference to the electrocardiogram have been relegated to another text by the same author. This, of course, emphasizes clinical appraisal which is very timely in this day of more and more gadgets. The text covers a lot of territory in a concise, neither exhausting or exhaustive manner.

HENRY D. FEARON.

Bacteriology

JORDAN-BURROWS TEXTBOOK OF BACTERIOLOGY. By William Burrows, Ph.D. With the Collaboration of Francis Byron Gordon, M.D., Richard Janvier Porter, Ph.D. & James William Moulder, Ph.D. 15th Edition, Philadelphia, W. B. Saunders Co., [c. 1949]. 8vo. 981 pages, illustrated. Cloth, $9.00.

That this is the fifteenth edition of this standard textbook is a fact that speaks for itself. It is now, as it always has been, a text eminently fitted for the needs of medical students and practitioners; complete enough to give most of the necessary information; clear and understandable enough to avoid unnecessary bewilderment.

The text has been brought completely up to date. Many chapters have been rewritten. Dr. J. W. Moulder has taken over the section on bacterial physiology; Dr. F. B. Gordon has become responsible for the viruses. Dr. R. J. Porter continues with the very valuable chapter on medical parasitology.

The popularity of this textbook will be maintained, for each edition has been made better than the preceding one.

ARNOLD H. EGGERTH.

Heat and Clothing

PHYSIOLOGY OF HEAT REGULATION AND THE SCIENCE OF CLOTHING. PREPARED AT THE REQUEST OF THE DIVISION OF MEDICAL SCIENCES, NATIONAL RESEARCH COUNCIL. Edited by L. H. Newburgh, M.D. Philadelphia, W. B. Saunders Co., [c. 1949]. 8vo. 457 pages, illustrated. Cloth, $7.50.

This text is a thorough study of the topics listed in the title. It has been edited by Dr. Newburgh, but there are fifteen contributors, each of whom is well established in his own particular field. The introduction consists of an interesting historical study of adaptation to climate among non-European peoples. This has been written in a very readable fashion and reminds one of articles to be found in the National Geographic Magazine.

The body of the book is a highly scientific, and in the opinion of the reviewer, a very complete treatise on the physiology of heat regulation. The science of clothing is well treated and one wonders if it might not be advisable to apply such knowledge to the practical problem of men's clothing in the hot humid weather we have during the summer.

A. SIDNEY BARRITT, JR.

MODERN THERAPEUTICS

Effectiveness of Various Drugs in Airsickness Prevention

Various drugs were tested as to their effectiveness in the prevention of airsickness, using vomiting as a criterion. The drugs and placebos were given one hour before takeoff in the trials reported by Chinn and Oberst in *Proc. Soc. Expt. Biol. Med.* [73:218 (Feb. 1950)]. In one group of 75 subjects given 50 mg. diphenhydramine hydrochloride 30.7 per cent were airsick and of a like number receiving placebos 55.3 per cent were airsick. In another group of 78 receiving 8-chlorotheophylline 50 per cent were airsick while among a like number receiving placebos 66.7 per cent were airsick. Among the third group of 135 subjects given 0.65 mg. hyoscine hydrobromide 19.3 per cent were airsick while among a like number receiving 0.65 mg. hyoscine hydrobromide and 50 mg. diphenhydramine hydrochloride only 10.3 per cent were airsick. The authors stated that the incidence of vasomotor disturbances and nausea not leading to vomiting were also decreased in the latter group.

Aureomycin Treatment of Trichomonas Vaginalis Vaginitis

Aureomycin was used in the treatment of trichomoniasis in 54 women, 12 of whom were pregnant. The patients were treated with vaginal insufflation of 500 mg. aureomycin in 2 Gm. talc for 2 successive days and then again on the 5th and 6th days. The pregnant patients received an additional treatment on the 8th day. The patients were then instructed to insert a 250 mg. capsule of aureomycin deep into the vagina every other night for 2 weeks. McVey, Laird, Flanagan, and Sprunt, writing in *Proc. Soc. Expt. Biol. Med.* [72:674 (Dec. 1949)], stated that 38 of the 42 nonpregnant patients and 9 of the 12 pregnant patients were cured with this treatment. All but one of those who relapsed were cured with an additional treatment and this one resistant patient was successfully treated with a third course. There were no significant toxic reactions and no adverse effects on pregnancy.

Vitamin P Protection Against Radiation Injury

Rats were used as the test animals to determine the effect of vitamin P in providing protection against injury from irradiation. The rats were divided into three groups but all received the same radiation, 800 r total-body radiation in a single exposure. Twenty rats served as the control group. During the second and third weeks after irradiation 80 per cent of the animals died. They all exhibited severe gross hemorrhages of varying severity and extensive pathological damage to the adrenal glands.

The treated rats were divided into two groups. One group received 4 mg. per day of vitamin P compound, a preparation obtained from citrus fruit and containing 4 flavonoids. The compound was given for 3 days prior to irradiation and for 7 days following. The mortality was reduced to 40 per cent and their lives were prolonged. The petechial hemorrhages and adrenal damages were less severe.

The second treated group, consisting of 20 rats, received 5 mg. of the vitamin P compound for 7 days prior to irradiation and for 23 days following. The mortality was reduced to 10 per cent and the petechial hemorrhages were slight or absent entirely.

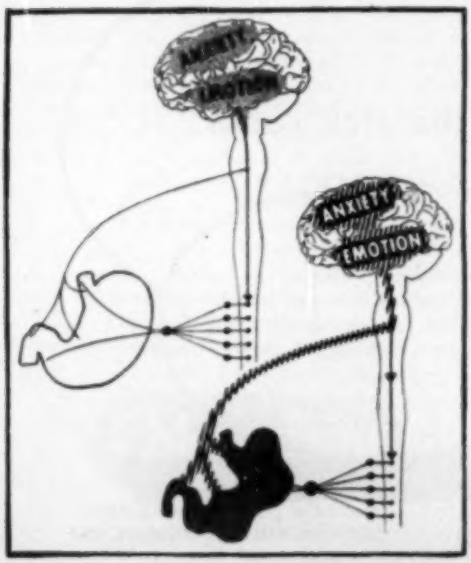
Writing in *Science* [112:112 (July 28, 1950)] Sokoloff, Redd, and Dutcher pointed out that radiation injury seems to

—Continued on page 58a

". . . about 50% of the patients who consult the general practitioner have complaints for which there is no discoverable physical or organic cause."[1]

Emotional response and adaptation to stress of the times play major roles in the increase of functional disorders. Exaggerated emotional response may produce somatic symptoms such as vague pains referred to various organs. Nausea, headache, cardiac and gastrointestinal distress are often presenting complaints. Diagnosis is usually easy in these cases because the number and variety of symptoms are not corroborated by physical findings. *Yet, these patients are seriously ill and merit attention and relief. Recent research has indicated that functional disturbances may develop into organic disease if long continued*[2]. In functional disorders, response to stress is effected via both branches of the autonomic nervous system. Therefore, treatment consists, where possible, in removal of the emotogenic factor (practical psychotherapy) and the "partial blockade" of the efferent autonomic pathways.

The family physician is well qualified to help these patients since he is most often aware of the environmental circumstances. His advice and guidance will do much to achieve the desired change in activities and habits and will help the patient to avoid "unhealthy situations".



Medical treatment is also essential in most cases. Controlled sedation of the entire autonomic nervous system accelerates recovery. This is accomplished by simultaneous administration of Bellafoline (cholinergic inhibitor), ergotamine tartrate (adrenergic inhibitor) and phenobarbital (central sedative).

Bellergal is a time tested preparation for administration in a wide variety of functional disorders. Bellergal inhibits the transmission of autonomic impulses without completely blocking organ function. This type of "mild sedation" will permit the patient to carry on daily activities while "taking stock of his difficulties". Karnosh and Zucker[3] state that, "Probably the best medication for all neurovegetative disorders is a combination of: (a) Bellafoline... (b) Ergotamine tartrate... (c) Phenobarbital... A good commercial preparation of these ingredients is a tablet called bellergal... The adult dose of bellergal is 3 or 4 tablets daily."

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Brochures available on request:
"The A.N.S. and Functional Disorders."
"The Menopause Needs More Than Hormones."
"The A.N.S. and—Gastrointestinal Disorders—Cardiac Neuroses—Gynecological Problems—Anxiety States." (A series)

Sandoz Pharmaceuticals

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—Continued from page 56a

cause a pronounced increase in capillary fragility and that the flavonoid compounds seem to afford considerable protection against this effect, at least in the test animal.

Vitamin B_{12} and Folic Acid in Megaloblastic Anemia of Pregnancy

In six cases of megaloblastic anemia of pregnancy and the puerperium the injection, intramuscularly, of 65 or 80 micrograms of vitamin B_{12} brought about no response. However, each case responded subsequently to folic acid, according to Ungley and Thompson in *Brit. Med. J.* [No. 4659:919 (April. 22, 1950)]. In 3 cases the dose of folic acid was as little as 2.5 mg. a day. In one case the dose rose to 30 mg. a day. Folic acid produced a dramatic effect: excessive hemolysis ceased and the rate of elimination of transfused blood cells fell to normal. Subsequently, the patients own red blood cells gradually increased to normal.

Sulfonamide Dosage in Early Infancy

A study was made on 57 infants ranging in age from 4 days to 8 months of the blood levels obtained following the administration of sulfonamides by various routes. Richmond, Kravitz, and Segar reported in *J. Pediat.* [36:539 (May 1950)] that a single initial oral dose of 0.13 Gm. of sulfadiazine per pound followed by 0.1 Gm. per pound every 24 hours thereafter produced a blood level of 3.1 to 9.5 mg. per 100 cc. in infants less than 2 months of age and 2.7 to 8.0 mg. per 100 cc. in infants more than 2 months of age. Blood levels resulting

—Continued on page 60a

For prompt relief and healing of burns–Chloresium Therapy

Clinical experience proves value of Chloresium chlorophyll preparations in the treatment of burns

From American Journal of Surgery, Jan., 1947—"Two patients were admitted with extensive and severely infected second and third degree burns of the head and both hands. The most severely burned hand in one case and the better hand in the other case were treated with continuous wet dressings of chlorophyll, Chloresium Solution (Plain), while the other hands were treated with boric solution . . .

"In both cases . . . the patients volunteered that the chlorophyll-treated hand was more comfortable. The chlorophyll hands produced granulations of better quality and more rapidly . . . In both cases, the final result after grafting has been better in the chlorophyll-treated hands."

From the Guthrie Clinic Bulletin, Jan., 1947—"Those (burn) patients who received Chloresium in the initial treatment showed the greatest beneficial effects. It was noticed that healing seemed to occur faster under chlorophyll therapy (*Chloresium*) than when other substances such as vaseline were used. In addition, secondary infection was kept at a minimum. In several cases having bilateral involvement of extremities, one extremity was used as a control and treated with vaseline while the other extremity was dressed with Chloresium Ointment. In each, the part treated with the water-soluble chlorophyll (*Chloresium*) healed more rapidly and with less infection than the control."

From Archives of Dermatology and Syphilology, March, 1948—"In 5 patients with chemical burns and sunburn, the water-soluble chlorophyll cream (Chloresium Ointment) was amazingly healing and soothing to the injured epithelium."

From American Journal of Surgery, Oct., 1945—"It has been shown rather conclusively that, of all the agents at present available for the stimulation of cell proliferation and tissue repair, chlorophyll (*Chloresium*) probably has the most constant and marked effect."

WHENEVER TISSUE HEALING IS A PROBLEM

Not only in burns, but also in wounds, ulcers and dermatoses—reports in more than 1150 published clinical cases show the majority of cases respond rapidly to treatment with Chloresium Solution (Plain) or Ointment.

These gratifying results are due to the therapeutic action of the *water-soluble derivatives of chlorophyll*. They are natural nontoxic biogenic agents which accelerate normal cell regeneration, thus measurably hastening the healing process. At the same time, they help control superficial infection, provide symptomatic relief and deodorize foul-smelling suppurative conditions.

Try Chloresium on your next burn case—or any other case where faster healing or deodorization is desired. It is completely nontoxic, bland and soothing.

Chloresium

SOLUTION (PLAIN); OINTMENT; NASAL AND AEROSOL SOLUTION

Ethically promoted—at leading drugstores

U. S. Pat. 2,120,697—Other Pats. Pend.

FREE—CLINICAL SAMPLES

RYSTAN CO., INC., Dept. MT-6
7 N. MacQuesten Pkwy., Mt. Vernon, N. Y.

I want to try Chloresium. Please send me clinical samples, without obligation.

*Dr.*_____

*Address*_____

*City*_____ *Zone*____ *State*_____

—Continued from page 58a

from the oral administration of 0.1 Gm. per pound initially and 0.064 Gm. per pound each day thereafter were 2.5 to 8.8 and 1.4 to 8.6 mg. per 100 cc., respectively. The subcutaneous administration of 0.032 Gm. sulfadiazine in a mixture containing an equal quantity of sulfamerazine produced blood levels of sulfadiazine 2.7 to 15.3 mg. per 100 cc. in the infants less than 2 months of age. An increase to 0.048 Gm. of each sulfonamide resulted in blood sulfadiazine levels of 7.0 to 14.7 and 1.3 to 10.2 mg. per 100 cc., respectively. There was no evidence of gross or microscopic hematuria although transient crystalluria occurred in 2 of the infants.

Atropine as Antidote for Organic Phosphorus Insecticides

Atropine sulfate is the specific antidotal treatment for organic phosphorous insecticides such as parathion, tetraethyl pyrophosphate, hexaethyl pyrophosphate and octamethyltetramidopyrophosphoric acid, according to Goldblatt in *Pharm. J.* [164:229 (Mar. 25, 1950)]. The most significant early symptoms of poisoning from these agents are tightness of the chest, slight twitching of the muscles of the eyelids and tongue, and contracted pupils. As the later stages of toxicity develop the most pronounced symptoms are respiratory distress, sweating, salivation, and contracted pupils. Death may result from the respiratory distress. An initial dose of 0.5 mg. of atropine sulfate should be taken orally and then repeated in about 1 hour if the symptoms continue. In cases where the patient's condition continues to deteriorate or when the patient is not seen until his symptoms are of an advanced stage 1 or 2 mg. of atropine should be given subcutaneously or slowly intravenously. In very serious cases

oxygen therapy and artificial respiration may be necessary. In such cases 2 to 3 cc. of a 25 per cent solution of nikethamide may be of value.

Chloramphenicol in Typhoid Fever

Good and McKenzie reported in *Lancet* [258:611 (Apr. 1, 1950)] that 6 patients with typhoid fever were treated with an average of 20.75 Gm. of chloramphenicol in 8 days. The drug was given orally at the rate of 4 Gm. the first hour, then 0.25 Gm. every 2 hours until the temperature was normal and then 0.25 Gm. every 4 hours until the end of the treatment period. The temperature and pulse rate became normal within 72 hours and stool cultures became negative in 3 cases during treatment but later became positive again. In 3 patients who had had positive urine cultures these became negative and remained so. Relapses occurred in 3 patients after their temperatures had remained normal for 16, 18, and 23 days. Two of these patients were retreated with a similar amount of chloramphenicol, successfully. The authors stated that there was no evidence of increased resistance to the antibiotic by the *Salmonella typhi*, and there were no toxic effects.

Another group of 9 patients with typhoid and treated with chloramphenicol were reported in the same journal on page 615 by Rankin, Adam and Grimble. The treatment schedule was very similar to the one described above except that 1 Gm. of the antibiotic was given daily for an additional week. Four of the treated group recovered, 3 relapsed and two had cardiovascular complications. Of 9 untreated patients 5 recovered, 3 relapsed and 1 had recrudescence. However, the average duration of fever was 3 days in the treated group as compared with 14½ days in 4 untreated cases. No side effects nor change in bacterial sensitivity to the antibiotic was observed.

A third report, given by El Ramli in

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the same journal on page 618 involved 200 patients with typhoid who were treated with chloramphenicol. The patients were treated with approximately 50 mg. per Kg. of body weight daily in divided doses at 2, 4, or 12 hour intervals until the temperature was normal. The temperature became normal in an average of 3.5 days although in 7 severe cases it remained high for as much as 27 days. The cases were observed for 3 weeks and in 109 patients treated on the 2 hour schedule there were 0 relapses in moderate cases, 7 in severe cases, and 19 in very severe cases. In 52 patients treated on the 4 hour schedule there were 0, 3, and 7 relapses respectively, and in 39 patients treated on the 12 hour schedule there were 0, 0, and 4 relapses respectively. In patients treated up to 5, 10, and 15 days the relapse rates were 26.7, 33.3, and 7.7 per cent, respectively. Complications occurred in 23. Side effects such as anorexia, nausea, stomatitis, rash, and mental apathy were severe in some cases.

Chloramphenicol in the Treatment of Infections

Chloramphenicol was administered in a wide range of infections caused by both Gram-positive and Gram-negative organisms. *Pseudomonas aeruginosa* and *Proteus vulgaris* proved to be the most resistant. However, bacterial resistance did not develop *in vivo* in cases that were bacteriological failures. Of 93 patients with urinary tract infections treated with an average of 3.4 Gm. per day for 6.9 days to a total of 23.6 Gm., 68 showed good clinical response and 64 urinary sterilization. The two most resistant organisms were mentioned above but with

—Continued on page 64a

PROVIDES PROTECTION WITHOUT IRRITATION

Evidence obtained by direct-color photography shows that the cervix remains occluded for as long as ten hours after an application of "RAMSES"* Vaginal Jelly.

"RAMSES" Vaginal Jelly immobilizes sperm in the fastest time recognized under the authoritative Brown and Gamble method of measuring the spermatocidal power of vaginal jellies or creams. This has been established by repeated tests for spermatocidal activity conducted by an accredited independent laboratory.

Clinical observation of patients receiving daily applications of "RAMSES" Vaginal Jelly for three-week periods reveals no evidence of irritation or other untoward effect.

"RAMSES" Vaginal Jelly is acceptable to even the most fastidious patient because it provides efficient protection without leakage or excessive lubrication. It is available at all pharmacies in regular and large tubes; the regular tube is also available in a package containing a measured applicator.

ACTIVE INGREDIENTS: Dodecaethyleneglycol Monolaurate 5%, Boric Acid 1%, Alcohol 5%.

Julius Schmid, Inc. gynecological division
423 West 55th Street, New York 19, N. Y.
quality first since 1883

*The word "RAMSES" is a registered trademark of Julius Schmid, Inc.

—Continued from page 62a

Escherichia coli and *Aerobacter aerogenes* the clinical and bacteriological cures amounted to about 90 per cent. Hewitt and Williams reported in *New England J. Med.* [242:119 (1950)] that 5 patients with atypical primary pneumonia, 5 with pneumococcal pneumonia, and 2 with hemolytic streptococcal pneumonia became afebrile within 48 hours. No benefit was obtained by 5 patients with ulcerative colitis and 3 with herpes zoster. Toxic reactions, particularly gastrointestinal, occurred in 1 of 12 patients receiving 2 Gm. per day, in 15 of 53 receiving 3 Gm. per day, 4 of 15 receiving 4 Gm. per day, and in 14 of 29 receiving 6 Gm. per day.

Clinical Observations on the Use of Terramycin

In a series of 10 adults with acute pulmonary infections terramycin HCl was given orally in 750 mg. doses every 6 hours to a total of 3 to 90 Gm. The response was rated as excellent in 2, good in 6, and fair in 1. King *et al* reported a second series of 8 patients in *J.A.M.A.* [143:1 (May 6, 1950)] who received 500 mg. of terramycin HCl every 6 hours. These patients had urinary tract infections. Seven of the patients received the drug for 5 days and 1 for 11 days. The results were rated as excellent in 4, good in 2, and fair in 2, with no relapses. *Proteus vulgaris* was not eliminated from the urine by this treatment. In a third group consisting of children ranging in age from 4 months to 9 years 500 mg. of terramycin was administered orally every 6 hours. In 3 with bacteremia due to *Salmonella cholerae-suis* Kunzendorf the results were excellent in 2 and good in 1; in 7 children with bacterial pneumonia

—Continued on page 66a

The record in PSORIASIS goes to RIASOL

RIASOL sets the record in psoriasis—improvement in 76% of a series of cases. Considering the fact that most of these cases were of long duration, many of them existing for years, this result is a remarkable therapeutic achievement.

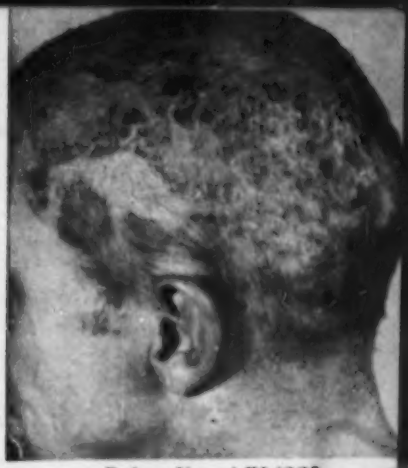
Comparatively speaking, RIASOL acts fast. In some cases the skin lesions of psoriasis cleared completely in a few weeks; the average period was 7½ weeks. To patients who have suffered for many years, this rapid disappearance of the ugly and disfiguring patches seems like a miracle.

RIASOL contains 0.45% mercury chemically combined with soaps, 0.5% phenol and 0.75% cresol in a washable, non-staining, odorless vehicle.

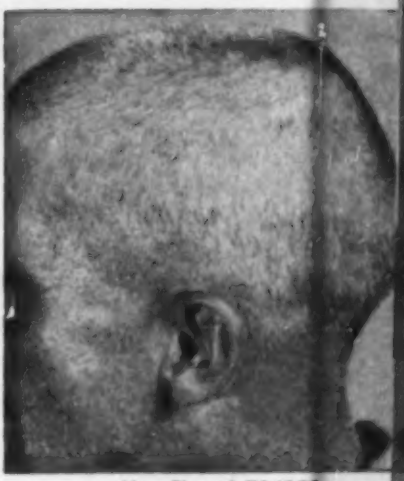
Apply daily after a mild soap bath and thorough drying. A thin, invisible, economical film suffices. No bandages necessary. After one week, adjust to patient's progress.

RIASOL is ethically promoted. Supplied in 4 and 8 fld. oz. bottles at pharmacies or direct.

Mail coupon today for your free clinical package. Prove RIASOL in your own practice.



Before Use of RIASOL



After Use of RIASOL

MAIL COUPON TODAY—TEST RIASOL YOURSELF

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SHIELD LABORATORIES
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Please send me professional literature and generous clinical package of RIASOL.

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City ..... Zone ..... State .....

Druggist ..... Address .....

RIASOL for PSORIASIS

—Continued from page 64a

the response was good in 6 and poor in 1; and in 2 with pertussis the results were good in 1 and excellent in the other. Side effects such as nausea, slight headache, and vomiting occurred in 6 children and in 2 it became necessary to withdraw the drug.

Penicillin Dentifrice and Tooth Decay

In 2,613 permanent teeth in a group of children ranging from 6 to 14 years of age who used a tooth powder containing 500 units of penicillin potassium per Gm. for a period of 2 years the total new decayed or filled surfaces during the first year numbered 288 and during the second year 183. In 1,924 permanent teeth among a control group of children who used a tooth powder without penicillin the total new filled or decayed surfaces during the first year was 405 and during the second year 338. Zander reported in *J. Am. Dent. Assoc.* [40:569 (May 1950)] that dryness and cracking of the lips occurred in 6 children from the penicillin group and in 13 from the control group. Usually the symptoms disappeared upon temporary withdrawal of the dentifrice, but in 2 from the penicillin group permanent withdrawal was necessary. From a group of 4,480 adult subjects who used the penicillin dentifrice for 3 months 1 had black tongue, 6 had facial rash or soreness of the oral mucous membrane, and 28 had dryness and cracking of the lips. There was no sensitizing reaction to the intramuscular injection of 10,000 units of penicillin in 41 patients after the

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use of the dentifrice. These patients had had no reaction prior to the use of the dentifrice.

Panparnit in the Treatment of Parkinsonism

Panparnit (diethylamino-ethyl-1-phenyl-cyclopentane-1-carboxylate hydrochloride) was used in the treatment of Parkinson's disease. The drug was given by mouth in one of two ways; if the patient had had relatively mild symptoms his usual medication was stopped and Panparnit was instituted but in more severe cases the usual medication was gradually reduced over a period of 3 or 4 days while the dosage of Panparnit was increased. In either case the dosage of the drug was 12.5 mg. every 3 hours during the first day, alternated with 25 mg. doses the second day, given 25 mg. every 3 hours the 3rd day, and followed with similar increments until the patient showed definite evidence of overdosage as indicated by dizziness, nausea, "light" feeling, or other symptoms. Then the dosage level was decreased until no further toxic symptoms were noted. The dosage ranged from 90 to 600 mg. a day given in divided doses. In a few cases, when there was evidence that the effect did not last for 3 hours, the drug was given every 2 hours. Writing in *J.A.M.A.* [139:629 (1949)] Schwab and Leigh stated that the degree of improvement among the 50 patients in the series was usually about 25 per cent and that the drug was superior to other previous medication in about 65 per cent of the patients. The most reliable indication of improvement was the report of relatives and patients on an increased ability to perform the usual chores of life.

To banish depression and nervousness

'Benzebar'—S.K.F.'s logical combination of 'Benzedrine' Sulfate and phenobarbital—ordinarily will dispel the mental depression and relieve the anxiety and tension that accompany so many of life's situations.

These occur, for example, *in association with* : : : family and financial troubles, chronic organic disease, persistent pain, old age and grief; *or following* . . . acute infectious disease, surgical operations, onset of the menopause and childbirth.

Smith, Kline & French Laboratories, Philadelphia

Benzebar*

the unique antidepressant

action of 'Benzedrine'* Sulfate and the mild sedation of phenobarbital

Each 'Benzebar' tablet contains 'Benzedrine' Sulfate (racemic amphetamine sulfate, S.K.F.), 5 mg.; phenobarbital, ¼ gr.

*T.M. Reg. U.S. Pat. Off.

NEWS AND NOTES

Medical History Department at Wisconsin

University of Wisconsin regents have set up a separate department of the history of medicine in the University Medical school at Madison.

The new department will be headed by Dr. Erwin H. Ackerknecht, who came to the University in January, 1947, as its first professor of the history of medicine.

Dr. Ackerknecht, at one time the only full professor of medical history in the nation, was born in Germany and received his medical degree at the University of Leipzig in 1931. From 1933 to 1939 he studied at the Sorbonne in Paris to receive a degree of diplomate of ethnology.

He came to the U. S. in 1941 after a stint in the French army. In this country he was associated with the Museum of Natural History in New York and Johns Hopkins University prior to coming to Wisconsin.

National Institute of Mental Health Data

The tendency toward overcrowding in State mental hospitals is evidently still on the increase, according to Dr. Leonard A. Scheele, Surgeon General of the Public Health Service. The report, based on a survey by the National Institute of Mental Health of the Public Health Service, shows that over 600,000 persons—equal to the combined populations of Nevada and New Hampshire—were patients in State mental hospitals during 1948.

Dr. Scheele said that 207 State mental hospitals supplied data for the survey. These institutions indicated that the degree of overcrowding increased by almost 10 percent during the year covered, rising from 16.7 percent at the end of 1947 to 18.2 percent at the end of 1948. There were three States in which the average daily resident patient population was about one and one-half times the rated hospital capacity.

Dr. R. H. Felix, Director of the National Institute of Mental Health, said that in 1948 State mental hospitals had less than half the number of physicians recommended for adequate medical and psychiatric care of resident patients. The number of full-time physicians in State mental hospitals fell 53 percent short of the number required under standard approved by the American Psychiatric Association. The shortage in personnel is and has been more severe in physicians, clinical psychologists, psychiatric social workers, nursing personnel, attendants and other specialized therapeutic workers. Dr. Felix pointed out that the adequacy of care received by patients in any hospital depends largely upon the relationship between the number and type of well-trained personnel and the number of patients under care. This relationship may be crudely expressed in terms of the average number of patients served by each full-time employee. However, it should be noted that the ratio of patients to total employees is not as meaningful as the ratio of patients to employees of specific occupational groups, he said. Thus hospitals really tending to fulfill a therapeutic function may differ markedly in their patient-physician ratio from those where the major emphasis appears to be on custody.

The survey indicates that with few exceptions, Southern and Western States have relatively fewer facilities for the mentally ill than Northern and Eastern States, Dr. Felix noted. The average daily resident patient population in State mental hospitals in 1948 was 463,496, or more than 3 patients per 1,000 civilian population. However, there is considerable varia-

—Continued on page 72a

NEWS AND NOTES

—Continued from page 70a

tion among States. For example, New York has a ratio of 5.5 patients per 1,000 population, as compared to 1.7 in New Mexico. Since State hospitals accounted, in general, for about 95 percent of the resident patient population in all nonfederal public mental hospitals, those differences appear to be fairly good indices of the State-to-State variation on the availability of facilities for the care of the mentally ill.

In every age group, male first admission rates were higher than those of females. Almost one-third of the first admissions were of patients 60 years of age or older.

Patients diagnosed as psychotic accounted for over 80 percent of all diagnosed first admissions. The diagnosis of dementia praecox (schizophrenia) was reported in about 20 percent of those admissions, psychosis with cerebral arteriosclerosis in 16 percent, senile psychosis in 13 percent, and manic-depressive psychosis in 6 percent—these four categories accounting for more than half of all diagnosed first admissions.

Among the first admissions for psychoses, the following diagnoses showed markedly higher rates for males than for females: general paresis; psychosis with other forms of syphilis of the central nervous system; alcoholic psychosis; psychosis due to trauma, and psychosis with psychopathic personality. Among females, rates were distinctly higher for the involutional psychoses.

There was a 6 percent increase in first admission rates from 1947 to 1948, and a 2 percent increase in the rate for patients treated and cared for by State mental hospitals. These increases do not necessarily mean a corresponding increase of hospitalizable mental illness of the population. Increased availability of hospital

—Continued on page 74a

Accepted for advertising in the Journal of the AMERICAN MEDICAL ASS'N

When low-sodium dieters complain their food tastes like hay...

Diasal is a new, improved type of salt substitute. It has the crystalline look of salt—virtually *duplicates the taste of salt! Diasal* gives a real salty flavor to flat-tasting, salt-free diet foods. It enables bored dieters to keep on with their diets—*promotes patient cooperation. Contains no lithium.*

Diasal is used just like salt, at the table and in cooking.

Constituents: potassium chloride, glutamic acid and inert excipients combined to stimulate food flavors, without bitterness or after-taste. Diasal may be freely prescribed as a diet adjunct in conditions of congestive heart failure, hypertension, arteriosclerosis and edemas of pregnancy.

Available in 2 oz. shakers and 8 oz. bottles.

DIASAL®

restores flavor and taste

no sodium · no lithium

For SAMPLE SHAKERS and low-sodium DIET SHEETS for several patients, write E. Fougera & Co. Inc. 75 Varick St., New York 13, N. Y.

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space and personnel frequently influences admission and resident patient population rates more than true changes in such mental illness.

The report, entitled "Patients in State Mental Hospitals: 1948," is Mental Health Statistics Current Report MH-B50, No. 4. Copies may be obtained without charge from the National Institute of Mental Health, Public Health Service, Bethesda 14, Maryland.

"I.V. STAT"

A new medical motion picture, "I.V. STAT" which graphically explains the techniques to be followed while giving an intravenous infusion is now available for showing to hospital staffs, nurses training schools and may be of interest to medical groups. The motion picture is in full color and sound and has a running time of 20 minutes. It was filmed with the cooperation of School of Nursing, Highland Alameda County Hospital, Oakland, Calif.

The second part of the film explains how hospital solutions are produced and was filmed at Cutter Laboratories, Berkeley, Calif.

Bookings for the "I.V. STAT" may be made by writing motion picture department, Cutter Laboratories, Berkeley, Calif.

Help CARE For Philippine Tuberculosis Victims

There are an estimated 300,000 cases of tuberculosis in the Philippines. Yet there are only 1,500 hospital beds for TB victims—1,000 of them at Quezon Institute, on the outksirts of Manila.

Those figures were cited to CARE's mission chief in the Philippines by Dr.

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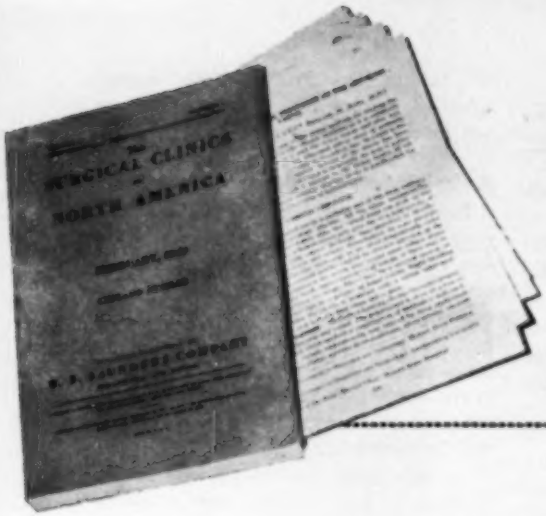

new clinical studies[1]

again prove value of **Westhiazole Vaginal** in **cervicitis** and **vaginitis.** Useful in clearing up cervical mucous plug or mucopurulent discharge; promotes "rapid healing" after cauterization; "gratifying results" when applied before and after hysterectomies and plastic repair.

dainty, convenient
single-dose disposable applicators

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WESTHIAZOLE® VAGINAL:
a sterile jelly,
10% SULFATHIAZOLE,
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Acidifies, normalizes vaginal pH, encourages growth of friendly Doderlein bacilli, combats secondary as well as primary infection, speeds healing.

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by Stein, I. F. and
Kaye, B. M.: So. Clin.
North Am. 30:259, 1950.

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—Continued from page 74a

Fernando B. Duran, a member of the sanitarium's staff, who also estimates that of the 300,000 victims, half are "open" cases —the last, most infectious stage of the disease.

Quezon Institute is doing its best to help as many victims as possible in the fight against the white plague. In addition to its 1,000 bed-ridden patients, the sanitarium provides clinic care for 300 ambulatory cases. But lack of the most basic supplies—food, clothing, linens, and even up-to-date books on modern medicine's methods of attacking the disease—combine to seriously hinder the institution's program.

The supplies it needs in its fight against TB can be sent by Americans through CARE, 20 Broad St., New York City, or any local CARE office.

American Red Cross Notes

Blood Program The Red Cross blood program may well become the greatest single health activity in history. At the end of the first year and a half of its operation the Red Cross blood program had 28 regional blood centers with 32 attached mobile units serving population areas totaling 40,000,000 persons. It is expected that 15 more regional centers will be established during the fiscal year. It is anticipated that by the end of the fiscal year blood collected from voluntary donors will have been distributed to nearly 2,000 hospitals.

School Bus Safety Illinois, Oregon, and several other states require Red Cross

—Continued on page 78a

3 Questions every doctor is asked

1. "Which evaporated milk should I use in my baby's formula?"

When you answer "Carnation," you name the milk which has been approved by the medical profession for generations. And Carnation protects your recommendation by maintaining unsurpassed standards of safety, uniformity, and nutritive value. Every can of Carnation Milk is processed with "prescription accuracy"... in Carnation's *own* evaporating plants... under Carnation's *own* strict supervision.

2. "Should I change to bottled milk when my baby goes off formula?"

Medical experience indicates that there is no need to change to another form of milk at this stage of baby's development. Baby still needs the protection of Carnation's constant uniformity and safety. Because Carnation is *soft-curd* milk — heat refined and homogenized — it is easier to digest. Carnation diluted with an equal amount of water is whole milk of the highest quality.

3. "How can I wean my baby from bottle to cup-drinking?"

Baby's natural resistance to change is increased if the cup contains milk with a strange new taste. And the use of a different form of milk can lead to digestive upsets. Doctors have found that the combination of Carnation's familiar flavor and uniform composition facilitate the weaning process... while its unsurpassed nutritional qualities encourage the uninterrupted healthy growth of the baby.

"FROM CONTENTED COWS"

The Milk Every Doctor Knows

NEWS AND NOTES

—Continued from page 76a

first aid training for school bus drivers. In Illinois alone, more than 50 Red Cross chapters conducted such training in the 1948-49 school year.

Civilian Protection in Wartime A new treaty for the wartime protection of civilians was adopted at a diplomatic conference in Geneva last summer attended by delegates from 59 countries. It is subject to ratification by the nations concerned.

Disaster and Welfare Agency Gen. George C. Marshall, recently appointed President of the American Red Cross, "now turns his wisdom, experience and great heart to guide the official humanitarian arm of the military forces and the nation's foremost disaster and welfare agency."—*New York Herald Tribune.*

Services to the Armed Forces Approximately $17,000,000 was spent by the American Red Cross last year on its services to the armed forces—more than was spent by any other agency except the military itself. For the fiscal year 1949-50 the Red Cross has budgeted nearly $20,000,000 for this purpose.

Free Rides The American Red Cross Motor Service clocked up more than 9,000,000 miles last year on assignments for hospitalized servicemen, veterans, military personnel, and civilians, including crippled children and adults, transporting disaster workers and supplies, assisting in the Red Cross blood program and in other Red Cross work.

Field Workers More than 2,000 American Red Cross field workers serving with the armed forces at home and abroad last year handled 775,152 cases concerning servicemen and rendered an additional 2,700,910 miscellaneous services.

Highway First Aid State police and

—Continued on page 80a

Control of pain and associated nervous tension requires

both analgesia and sedation

'EMPIRAL' TRADE MARK

has the DOUBLE ACTION which relieves pain and promotes restfulness

Each compressed product of 'Empiral' contains:-

Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
Aspirin *(Acetylsalicylic Acid)*	gr. 3½

Also available 'TABLOID' 'EMPIRIN' COMPOUND® *with and without Codeine Phosphate*

BURROUGHS WELLCOME & CO. INC. (U.S.A.) TUCKAHOE 7, NEW YORK

NEWS AND NOTES

—Continued from page 78a

highway patrolmen in 45 states have Red Cross first aid training as a part of their program, and a total of 2,412 police vehicles are designated as mobile first aid units in 26 states. In 19 states 185 highway first aid stations are located at state police barracks or substations.

Water Safety With a record number of 677,368 certificates issued during the 1948-49 fiscal year, the Red Cross Water Safety program is steadily expanding. Since 1914, when the program began, more than 6,000,000 certificates have been issued for courses completed in swimming and life saving.

Men Volunteers More than 1,000 men are serving as Red Cross volunteers in 68 Veterans Administration hospitals. Included are college students, retired businessmen, construction workers, artists, professors and salesmen, who serve as movie projectionists, leaders for hobby clubs, party hosts, teachers, sports organizers, or friendly visitors.

Nurses for Disaster Service In 72 disasters affecting 32 states during the fiscal year ending June 30, 1949, 1,572 nurses served in Red Cross disaster relief operations. Duties included recruitment of nurses, staffing of emergency shelters and emergency medical stations, home visits to the ill and injured disaster victims, and supplementing hospital nursing staffs.

College Red Cross Work College students on approximately half the campuses of this country are devoting part of their spare time to community service as Red Cross volunteers.

Accident Prevention During the 1948-49 school year, 1,845,678 children in primary and elementary grades received instruction in accident prevention through use of the Suggested Guides for Safety Education distributed to teachers by the American Red Cross. It is estimated that some 2,000,000 more children received instruction through use of guides distributed each month.

Allergy Experts Say Antihistamines Not Effective

Antihistaminic drugs can neither prevent nor cure the common cold, three Northwestern University allergy experts charge in a new book. The Northwestern scientists also assert that there are as yet no antihistamines which do not produce undesirable side effects in some people.

The authors of the new volume, "The Antihistamines," are Dr. Samuel M. Feinberg, chief of the Division of Allergy and director of the Allergy Research Laboratory of Northwestern's Medical School; Dr. Saul Malkiel, director of research at the Laboratory; and Dr. Alan R. Feinberg, clinical assistant in medicine and attending physician in the Medical and Allergy Clinic.

The scientists state that a number of physicians have reported that the drugs destroy white or red blood cells. Because of this, the authors urge those who take the preparations over a long period to have frequent physical checkups.

SIMPLIFYING THE PROBLEM OF URINARY ANTISEPSIS

The problem of maintaining urinary antisepsis is simplified by the wide antibacterial range of MANDELAMINE* (methenamine mandelate). There is little or no danger that bacteria will develop resistance to it. Dietary or fluid regulation or alkalinization is unnecessary. Supplementary acidification is required only when urea-splitting organisms occur.

Patient-cooperation in adhering to the prescribed regimen is easy to obtain, because the administration of only 3 or 4 MANDELAMINE tablets three or more times daily usually renders the urine sterile in a few days. Gastric upset is unlikely to occur.

MANDELAMINE will be found helpful in speeding recovery from pyelitis, pyelonephritis, nephroptosis with pyelitis, cystitis, prostatitis, nonspecific urethritis, and infections associated with urinary calculi or neurogenic bladder; and for pre- and postoperative prophylaxis in urologic surgery.

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Samples for clinical trial and complete literature available to physicians on request.

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WANTED	FOR SALE
Assistants	Books
Physicians	Equipment
Locations	Practices
Equipment	FOR RENT
Books	MISCELLANEOUS

CLASSIFIED ADVERTISING FORMS CLOSE 15th of PRECEDING MONTH. If Box Number is desired all inquiries will be forwarded promptly. Classified Dept., MEDICAL TIMES, 67 Wall St., New York 5, N. Y.

WANTED (Physicians, Assistants, etc.)

COUNTRY practice for general practitioner open. Chesapeake Bay area. Box 10A71, Medical Times.

DETROIT. General practitioner wants nurse or young lady experienced in x-ray, BMR & blood counts. Reply in longhand, giving references, etc. Send recent snapshot. Box 10A66, Medical Times.

EENT man wanted for old clinic group. Illinois. Box 10A65, Medical Times.

WANTED—General practice and surgery assistant. Calif. Box 10A70, Medical Times.

WANTED. General practitioner, licensed in Illinois to associate with established physician; own modern 17 bed hospital, small town southern Illinois. Salary $6,000 plus modern house. Box 10A67, Medical Times.

LOCUM TENENS—Large general practice in western Pa. City of 55,000. Open Oct. 1 to June 1, 1951. Ideal financial set-up for 1951 resident acceptee. Box 10A69, Medical Times.

THERE are many towns in South Dakota crying for a doctor. Collections are good and country doctors are Personages. If you want open arms, look into some S. Dakota location. Box 10A68, Medical Times.

WANTED—Young internist as assistant by a certified internist in midwestern town of 45,000. Partnership later. Box 10A72, Medical Times.

WANTED—Young physician, class A school, interested in EENT but able to help with general practice. Forming small group in Colorado town of 15,000. Box 10A64, Medical Times.

WANTED (Equipment, Homes, etc.)

WANTED—Good used Sanborn basal metabolism; Liebel Flarsheim S.W. diathermy with hinged drum and good used direct writing cardiograph. Box 10B13, Medical Times.

WANTED—Medical instruments of diagnostic or therapeutic value. Either antiques or new ideas. Also interested in any suggestions. Making a collection. Box 7B7, Medical Times.

—Continued on page 84a

now to sleep—
perchance to dream
undisturbed
by night-time ***itch***

EURAX®

ANTIPRURITIC CREAM

EURAX antipruritic cream, applied to the itching area before retiring, is your patient's best assurance of a full night of undisturbed sleep.

A totally new antipruritic . . . EURAX, original product of Geigy research . . . sets new standards in the treatment of pruritus. In a carefully controlled study[3] EURAX provided "excellent (complete) relief" in 66.2 per cent of cases, and "moderate (considerable) relief" in 27.4 per cent. In most instances a single application ensured relief for 6-8 hours or more. In no case did the cream lose its effectiveness on continued application.

Not an antihistaminic . . . not a -caine derivative . . . not a phenol preparation . . . EURAX gives quicker, longer-lasting itch control with notable absence of local irritation, sensitization or systemic toxicity.[3]

As a specific in the treatment of scabies EURAX Cream in a single application eradicates the infection in over 90% of cases.[2] A second application gives practically a 100% cure rate.[4] No prior bathing or scrubbing required. Bacteriostatic, EURAX accelerates healing in infected scabies.

1. Couperus, M.: J. Invest. Dermat. *13*:55, 1949.
2. Patterson, R. L.: Southern M. J. *43*:449, 1950.
3. Peck, S. M. and Michelfelder, T. J.: New York State J. Med. In press.
4. Tronstein, A. J.: Ohio State M. J. *45*:689, 1949.

Geigy

EURAX (brand of crotamiton) Cream: 10% N-ethyl-o-crotonotoluide* in a vanishing cream base supplied in tubes of 20 Gm. and 60 Gm. and jars of 1 lb.

*U.S. Pats. #2,505,681 2,505,682

E-19

GEIGY CO., INC., Pharmaceutical Division, 89-91 Barclay St. • New York 8, N. Y.

CLASSIFIED ADVERTISEMENTS

—Continued from page 82a

WANTED: a second-hand microscope. Will pay a reasonable price. Box 8B9, Medical Times.

WANT TO BUY used instruments or complete office equipment. Desire inventory and condition of material. Prefer blanket price. La. Box 9B11, Medical Times.

WISH TO BUY: Suction & pressure unit in cabinet and May ophthalmoscope in good condition. Give details on make, year and price. Box 8B10, Medical Times.

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G.P. doing some surgery seeks change in Calif. or New York to improve experience in surgery. Box 10C13, Medical Times.

MY SON, B.A., M.S., at present Parasitologist for Dept. of Health would like position as Chief Parasitologist or instructor in same subject. Box 10C14, Medical Times.

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PHYSICIAN wishes association with sanitarium, N.Y. metropolitan area. Will invest. Box 9C12, Medical Times.

PHYSICIAN, 35, married, wishes association with busy surgeon or preceptorship. Has 9 years general practice, 2 year internship. Prefer man within 20 mile radius of Newark, N. J. Box 7C8, Medical Times.

PRECEPTORSHIP or assistantship wanted with either a plastic surgeon or general surgeon or other surgical specialty by 35 year old married G.P. 8 years G.P. Practice successful—but wants to specialize. Box 7C11, Medical Times.

WANTED (Miscellaneous)

WISH TO PURCHASE: Ewing, J., "Neoplastic Diseases," 1940, Saunders; Joseph Needham, "Chemical Embryology," 3 vols., Cambridge. Box 7D7, Medical Times.

WANTED: Used Davis' Gyn. & Obs.; Brennemann Pediatrics. State condition, price and transportation. Box 9D8, Medical Times.

BOOK—"Oral Sepsis as a Cause of Septic Conditions" by W. Hunter; 1901 (London). Box 4D4, Medical Times.

—Continued on page 86a

The "DRY TREATMENT" OF VAGINITIS

Comforting to the patient, simple and clean to administer, is the "dry treatment" of vaginal leukorrhea, using—

1. **TRYCOGEN POWDER** insufflation in the office; (optional)
2. **TRYCOGEN INSERTS** for home treatment

In trichomonal, monilia, or senile vaginitis, TRYCOGEN acts to destroy the parasitic invaders, relieve the pruritus, and restore the normal vaginal flora.

TRYCOGEN presents sodium thiosulfate, thymol, oxyquinoline sulfate and oil of wormwood in a base of boric acid and starch. Non-irritating; non-staining.

Trycogen Inserts, Boxes of 18 and 100 • Trycogen Powder, 25-gram vials. Also in 8-oz. and 16-oz. containers.

THE ALPHADEN COMPANY

CHICAGO, ILLINOIS

CLASSIFIED ADVERTISEMENTS

—Continued from page 84a

WANTED—Volumes I and II, Textbook of Ophthalmology, by Duke-Elder. Will buy one or both volumes. Box 10D9, Medical Times.

FOR SALE (Homes, Sanatoria, etc.)

25 BED clinic hospital for sale. 10 rooms in clinic. Central Texas. Completely air-conditioned. 1200 admissions yearly. 200 majors, 400 minors, 125 obstetrical. Box 10E11, Medical Times.

ACTIVE GENERAL practice—4 bedroom, 3 bath house; 6 room office building. Moderate price for real estate only. Small town—near San Diego, Cal. hospitals. Box 8E10, Medical Times.

MIAMI BEACH, Fla. Completely equipped medical office, long established in exclusive section. Ready for immediate practice. Price less than first year's income. Terms. Personal reasons for selling. Would consider Locum Tenens. Box 7E8, Medical Times.

FOR SALE OR RENT—28 bed, licensed convalescent home on 3 acre tract of land in southern Conn. Excellent retirement income on small income. Details by writing: Box 179, Wallingford, Conn., or Box 7E9, Medical Times.

FOR SALE (Practices)

COMBINED office-residence with general practice for sale in growing L. I. suburban community. Leaving to specialize. Box 7F17, Medical Times.

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FOR SALE: Going practice, established 25 years; home and office. Located in Bethlehem, Pa. Pop. 22,000. Box 76E1, Medical Times.

LUCRATIVE general practice in Wash., D. C. Specializing and leaving city. Like paying rent. Box 10F23, Medical Times.

LUCRATIVE suburban general practice, Omaha, Neb. Combined office-residence, or all rooms could be offices. Ill health forces sale. Thorough introduction. Terms. All equipment, part or none. Box 10F21, Medical Times.

LUCRATIVE general practice for sale. Home and office combination in southern N. J. Wish to leave to specialize. Can stay as long as necessary to introduce. Box 7F16, Medical Times.

PRACTICE FOR SALE. So. Texas town of 2,000. Only 2 other physicians in county of 9,000. Grossing in excess of $30,000, without surgery. 6½ room clinic, with or without equipment. Box 9F19, Medical Times.

PRACTICE FOR SALE: Southern Cal. office leased. Will transfer lease and introduce G. P. in January, 1951. Leaving to specialize. Box 8F18, Medical Times.

WELL ESTABLISHED practice and fully equipped office being offered to qualified M.D. Ill health is reason for leaving present location. Los Angeles, Calif. Phone MA 6-7017 or write Box 7F14, Medical Times.

PRACTICE and 1½ yr. old, 23 room medical bldg. for sale. 10 rooms fully equipped. $50,000 industrial, general and surgical practice. Ideal setup for 3-4 man group practice. No.-East Ohio. City of 30,000. Box 7F15, Medical Times.

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FOR SALE (Equipment)

BASAL, EKG, Burdick Rhythmic Constrictor for sale. Box 10G51, Medical Times.

B.M.R. machine (Jones); EKG (Cardiotron); Ultra Violet (Hanovia). All in excellent condition. Will sacrifice. Box 10G52, Medical Times.

ELECTROCARDIOGRAPH machine with cabinet. Perfect performance and appearance. Complete. $350.00. Box 10G55, Medical Times.

ELECTROCARDIOGRAPH, Beck-Lee, Model J. Excellent condition. Just factory inspected. Complete with carrying case—$275.00. Box 10G50, Medical Times.

EXAMINING table, ENT chair and revolving stool (cream color) for sale. $35.00. Call LU-7-1091 between 12:00 and 1:00 P.M. or write Box 10G53, Medical Times.

FOR SALE—$200—Ediphone—complete with dictating & transcribing machine—2 doz. records—excellent condition. Box 8G39, Medical Times.

FOREGGER Australian midget portable anesthesia machine. Six yoke. Waters to and fro filter. Carrying case. Cost when new: $286. Excellent condition. For sale to best offer over $100. Box 8G40, Medical Times.

PORTABLE Beck-Lee electrocardiograph machine. Excellent condition. $375. Box 8G41, Medical Times.

WAITING ROOM furniture, office equipment, G.E. refrig., gas stove for sale. Ready to start practice. $200. Pennsylvania. Box 7G36, Medical Times.

FOR SALE—1 10-year-old ultra violet; Fisher cold quartz lamp for any reasonable offer. Box 10G56, Medical Times.

FOR SALE—100 x 100 x-ray tilt table. Double focus tube. Excellent shape. Recent model. Box 10G47, Medical Times.

LEPEL high frequency ultra violet light; Lepel high frequency short wave machine, large size. For heat and surgery. Box 10G48, Medical Times.

MAJESTIC short wave diathermy with pads, cuffs, surgical unit, etc. Excellent condition. For sale—F.O.B. $50.00. Box 10G49, Medical Times.

PROFEX mobile x-ray, slightly used, hand timer, illuminator, head flouroscope, tank. Nearly $1,000 new. For sale for $500.00 or best offer. Box 10G57, Medical Times.

X-RAY machine, 200 milliampere, Picker table with horizontal flouroscopy; 200 ma. Aeromax tube over table, Machlett tube under table; upright high speed Bucky mounted on chest plate holder. Very good condition. Price: $2250.00 Box 10G54, Medical Times.

FOR RENT (Offices, etc.)

CAL. MED. BLDG., 1401 S. Hope St., L. A., Cal. Sublease 4 rm. suite, lab. and sell G.P. office equipment. Reception room, consultation room, 2 treatment rooms, short wave and infra-red lamps, 2 steel suspension files with locks, 2 typewriters, etc. Sacrifice. No charge for practice. Rent reasonable. Box 7R16, Medical Times.

FOUR (4) room dental office in Yonkers, N. Y. No living quarters. Call YO-3-0125 or write Box 10R25, Medical Times.

—Continued on following page

CLASSIFIED ADVERTISEMENTS

—Continued from preceding page

DOCTOR'S OFFICE for rent. Two separate rooms and bathroom. Joint waiting room. Excellent parking facilities. Centrally located. Inquire: J. G. Makol, M.D., 167 Maple St., Springfield, Mass., or Box 7RJ0, Medical Times.

FOR LEASE—attractive new suites; ground floor location; ultra-modern; all utilities; parking; most reasonable. Los Angeles, Cal. Call HO 9-1359 or write Box 7R19, Medical Times.

FOR RENT: Fully equipped offices in N. Phila. Broad-Olney section. Afternoon & evening hours available. 800 sq. feet. E.C.G., B.M.R., fluoroscope, diathermy Central transportation. Box 8R22, Medical Times

OFFICE SPACE available for specialist, optometrist, etc., in association with est. general medical practitioner. Est. location for over 30 years. Box 8R21, Medical Times.

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OFFICE for Optometrist available immediately for rent. M.D. and Chiropodist present on same floor. Mass. Box 9R23, Medical Times.

DOCTOR'S OFFICE for rent—full or part time; large, fully equipped, attractive, good address, Manhattan. Ideal for surgeon, internist or psychiatrist. N. Y. C. Call ATwater 9-0872, or write John Prutting, M.D., 1085 Park Ave., NYC 28, N. Y., or Box 7R17, Medical Times.

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COMPLETELY equipped office space available mornings. 34-57 82nd St., Jackson Heights, L. I. Box 9S1, Medical Times.

PHYSICIAN'S office to share, completely equipped; morning, afternoon and evening hours. Call TR 9-6486 between 5:00 and 7:00 P.M. or write Box 10S2, Medical Times.

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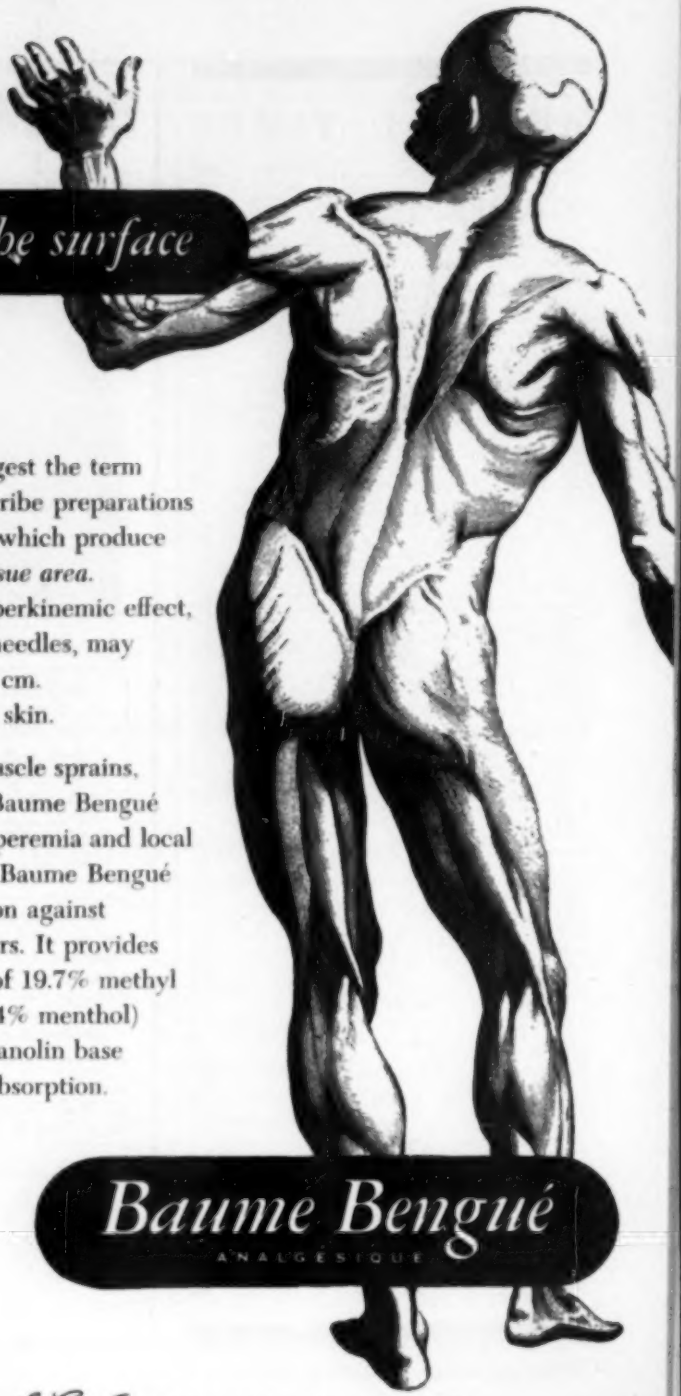
MEDICAL TIMES

Advertisers Index

OCTOBER, 1950



Beneath the surface

Lange and Weiner[1] suggest the term "hyperkinemics" to describe preparations such as Baume Bengué which produce blood flow *through a tissue area.* They point out that hyperkinemic effect, as measured by thermoneedles, may extend to a depth of 2.5 cm. below the surface of the skin.

In arthritis, myositis, muscle sprains, bursitis and arthralgia, Baume Bengué induces deep, active hyperemia and local analgesia. Systemically, Baume Bengué promotes salicylate action against underlying disease factors. It provides the high concentration of 19.7% methyl salicylate (as well as 14.4% menthol) in a specially prepared lanolin base to foster percutaneous absorption.

1. Lange, K., and Weiner, D.: J. Invest. Dermat. 12:263 (May) 1949

Baume Bengué

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Effective therapy of Trichomoniasis can now be achieved with this new development of ARGYROL. Supplemental home use of identical powders in capsule form solves the problem of better control in even stubborn cases.

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